

# MARQUETTE BUSINESS REVIEW

**FALL, 1960**

## **TABLE OF CONTENTS**

	Page
THE FUNCTIONAL ECONOMY . . . . .	1
CONSUMER INSTALLMENT CREDIT IN THE 1960'S . . . . .	16
ECONOMIC GROWTH — THE 'SIXTIES VERSUS THE 'FIFTIES . . . . .	24
COMMUNIST CHINA: TAKE-OFF TO SUSTAINED ECONOMIC GROWTH? . . . .	27
TWO CASES OF INDUSTRIAL LAND DEVELOP- MENT FROM THE POINT OF VIEW OF A PARTICIPATING FIRM . . . . .	39

**Volume IV**

**Number 4**

Published by Center for Business Services  
Robert A. Johnston College of Business Administration  
Marquette University Milwaukee 3, Wisconsin



## **MARQUETTE BUSINESS REVIEW**

Published quarterly by  
the Center for Business Services,  
Robert A. Johnston College of Business Administration,  
Marquette University, Milwaukee 3, Wisconsin.

### **MARQUETTE UNIVERSITY**

The Very Reverend E. J. O'Donnell, S.J. ....President

### **ROBERT A. JOHNSTON COLLEGE OF BUSINESS ADMINISTRATION**

Orville H. Palmer .....Acting Dean

### **CENTER FOR BUSINESS SERVICES**

Jacobus Kruyne .....Director

#### **Management Center**

Howard Wilson .....Director

#### **Research Center**

Harvey E. Hohl .....Director and Editor

Edith M. Lynch .....Director, Publications and  
Conference Proceedings

John Slater .....Staff Economist

Andre Moule .....Research Assistant

### **ADVISORY COMMITTEE**

William N. Bergstrom

Walter Gast

Howard Launstein

Charles Miller

Orville H. Palmer

Reverend Francis J. Ziegler, S.J.

Herbert Zollitsch

## **THE FUNCTIONAL ECONOMY**

**By Reverend Bernard W. Dempsey, S. J.\***

That the economic organization and processes of a nation -- the means and the ways by which its citizens seek to accommodate their needs through the application of human intelligence and effort to the scarce resources of nature in the often complex business of making a living -- are the products of beliefs which express themselves in economic behavior, is a proposition whose validity can scarcely be questioned. It is the functioning of the human beings who economize in an economy that determines what the economy is; and their economic functioning proceeds from the beliefs, economic and otherwise, which these human beings entertain. Both the beliefs and the functions have an inescapably social as well as individual impact and significance.

Since there is no necessary uniformity or consistency among the members of a society, either in the beliefs of which their economic behavior is the expression, or in the behavior which proceeds from their beliefs, or in the relationship of belief and behavior, it is entirely possible for the economy of a nation to present contradictions of sufficient importance to provoke searching examination, if not serious concern.

In his book, *The Functional Economy*, Father Dempsey reflects the interest and the concern of many responsible students and practitioners in the American economy about the inconsistencies and contradictions of belief and behavior in our economy which must be apparent to the thoughtful and analytically disposed observer. While he exhibits no great alarm about the manifest incongruities in American economic belief and behavior -- and indeed, discloses hopeful evidence of a developing though as yet inarticulate maturation in what Americans think and do about their economic affairs and institutions -- and while he indulges in no dramatically arresting conjectures about the future of our economy, he, nevertheless, through the very sobriety and objectivity of his analysis, conveys a message of unmistakable urgency.

To his task of critically examining the functional aspects of our economy and of constructively proposing a system of empirically derived beliefs as a basis for reforming the dissonant characteristics of the economy into a better and more enduring order, Father Dempsey brings to bear both his exceptional competence as an economist and his penetrating insights as a thoroughly trained social moralist. The combination is as germane as it is unusual.

Father Dempsey amply acknowledges the legitimacy of scientific economic observation, analysis and inference by economists who, in the

-----

\*New York: Prentice-Hall, Inc., 1958; 515 pages.

In memory of Reverend Bernard W. Dempsey, S. J., who passed away on July 23, 1960, Professor Walter Gast is presenting this review of Father's recent book on our economic system.

interest of accurately discerning economic phenomena and of identifying the principles which explain them, isolate themselves resolutely from other manifestations of individual and social behavior and from the principles by which the latter are or ought to be controlled. At the same time, he correctly observes that economists as well as practical economic functionaries tend in every age to be strongly affected by the circumstances and problems of their time and may, therefore, attach enduring validity to ideas which are relevant largely to their own period in history.

On the other hand, Father Dempsey never loses sight of the fundamental truth that all economic means, functions, and institutions have but a single proximate object, namely, man; and that the resources of the earth can be made to serve the needs of man -- their only logical destiny -- only through the socially collaborative knowledge, skill and effort of man. Since the economy exists only for man and only by man, it can have no meaning except a human meaning. Since man, by virtue of his nature, is dependent upon his fellow-men and must collaborate with them in many forms of social undertaking, and since the resources of nature are there to serve all men, and thus, though privately owned, are subject to the valid claims of all men, all economic activity has a social meaning. Consequently, the beliefs of men which find expression in their economic behavior cannot be sound and true unless they are socially framed and socially directed.

The principal problem which Father Dempsey undertakes to analyze and for which he proposes a solution may be stated as follows. What system of beliefs would enable the persons whose collective behavior determines the economy so to direct their self-determined economic functioning that an economic order would ensue which, on the one hand, yields a maximum of economic and non-economic good for all who participate in it and which, on the other hand, is consistent with the objectively sound and historically affirmed American ideals of socially responsible individual freedom? Ancillary to this basic problem, Father Dempsey considers a second, though by no means inconsequential problem for which he studiously and for clearly exposed reasons eschews any semblance of a fully structured solution, insisting that there can be no single or final formulation of a solution for it. The second problem may be stated in the following manner. How could such a system of beliefs -- such a philosophy, in other words -- be practically implemented in a manner consistent with its own aims and tenets?

The author draws his material from two principal sources. Economic data and doctrines are taken from the writings of economists whose contributions to the science of economics are generally acknowledged as being significant and worthy of attention. The economic equipment and apparatus of the author's mind would certainly be respected by the majority of contemporary authorities in this field. There is nothing in Father Dempsey's economics which is in any significant sense either radical or unconventional.

His social and philosophic views and principles are plainly, and with scrupulous annotation, derived chiefly from papal encyclicals, most generously from the encyclical of Pius XI, Quadragesimo Anno, "Restoration of the Social Order," 1931. In addition, he frequently invokes the relevant



philosophic observations of Saint Augustine and Saint Thomas Aquinas, as well as the contributions of modern Jesuits, particularly those of Oswald von Nell-Breuning, S. J., and Heinrich Pesch, S. J.

To Catholic readers of this book, its heavy reliance upon papal pronouncements and upon the writings of church fathers and Jesuit priests will be deeply reassuring and highly convincing. To readers whose religious persuasions are other than Roman Catholic, the apparent dependence upon the authority of the Catholic Church can easily be so disconcerting as effectively to block their minds to the universal value of Father Dempsey's book. Those who, like the present reviewer, are not Catholic -- whether by conviction, or ancestry, or simply protestation -- are frequently in danger of denying themselves the value of ideas from Catholic sources, simply because the sources are Catholic. This is, of course, neither intellectually defensible, nor morally consistent, nor theologically prudent. Only a blinding bias could have induced a recent reviewer in a professional journal of high standing to attempt contemptuously to dispose of Father Dempsey's The Functional Economy by an absurdly superficial and uninformed judgment that the book would be useful to persons teaching in Catholic schools but not to others.

Universal receptivity could readily be accorded Father Dempsey's book if readers who are not Catholic will bear in mind that the views and principles of papal and other Catholic writers which this book so frequently invokes are not based upon and do not depend upon the distinctive theological positions of the Catholic Church. The whole of the social and moral concepts which Father Dempsey applies to the problems upon which his book is focused is derived from close objective observation of man and society. The premises upon which all of the social-moral principles employed by him actually rest are ones to which every observing and thoughtful person of good will would have to assent because their validity is empirically and not theologically established.

Moreover, Father Dempsey goes to considerable pains to point out that more than a few highly respected modern scholars and writers who are not Catholic, as well as non-religious groups, have independently proceeded upon the same unimpeachable assumptions as do the Catholic authorities and have come to very similar or even nearly identical conclusions. He might have mentioned also the Lutheran theologian, Emil Brunner, and his well-received Justice and the Social Order. Another case in point is a book written by Harvard's Professor Selekan under the title, A Moral Philosophy for Management, and published a year later than Father Dempsey's book.

Properly approached and intelligently read, The Functional Economy could become one of the important books of the century. For it analyzes a problem which unquestionably is the most pressing problem in our economy and which at the same time is one of the major social problems in the United States; and it pursues its task at an exceptional level of both economic and socio-moral competence. The solution proposed in the book is one to which all men of good will should at least be willing attentively to listen, and one which is well within the implementing ingenuity of American business men.

The Functional Economy is a book of twenty-four chapters and 488 pages of text, followed by eleven pages of bibliographic references. Although the chapters are not grouped under any designated divisional headings, they lend themselves roughly to a separation into two principal parts. The first fourteen chapters are devoted mainly to a presentation of certain economic concepts and theories and of certain social and philosophic principles which the author believes to be especially relevant to the two problems upon which the analytical and the constructive aims of the book are directed. The remaining ten chapters serve to bring into relief a system of ideas for the solution of the two problems and to relate these ideas to certain inexorable elements of the modern American economy.

The book begins with a brief historical sketch of the development of economic doctrine and economic analysis. The latter, economic analysis, is a method of examining economic phenomena and problems by the application of appropriate intellectual instruments or "tools" for the purpose of describing and explaining such phenomena. Economic doctrine may be said to consist of interpretations of economic phenomena which take the form of "principles," often of broad social relevance, which are then advocated as valid explanations of economic behavior or as desirable guides for economic policy. The validity of doctrine depends, of course, upon the quality of the analytical apparatus by which doctrine is derived, and upon the competence of the user of the apparatus. Since the data are always circumscribed by time and place and may, therefore, represent only a limited period or locality, the ensuing doctrine may have only limited validity even though it is assumed or alleged to possess a value beyond its own temporal and spatial circumstances. Moreover, since the methods and tools of analysis have undergone change and development, the producers of doctrine have not necessarily had the best of analytical tools at their disposal; and the tools which may have been sufficient at one time and place are not necessarily of equal appropriateness for another age or locality.

In his first chapter, Father Dempsey punctuates these observations in his references to economists, such as Smith, Ricardo, Marx, Marshall and Keynes, whose ideas continue to have a significant impact upon the functioning of the modern American economy. They are critically examined in later chapters of the book.

For evidence of the development of economic analysis, as distinguished from economic thought or doctrine, the author relies wholly upon the work of Professor Schumpeter for whom he manifests a deep respect and admiration.

Attention to the apparatus of economic analysis raises the question whether moral principles have a legitimate place in the economist's kit of analytical tools. Regrettably, Father Dempsey disposes of this important question quite summarily by simply insisting that "an ineradicable ethical element always remains" and that "these (i.e., moral) instruments, concepts, and principles, if they are actually indispensable or even very helpful in revealing certain kinds of truth, ought to be used by sincere investigators." A reading of the entire book makes it perfectly clear why the author felt it needless to enter into an elaborate apology for a proposition upon which the whole value of the book depends. The Catholic Church has

taken a strong, official and unequivocal position in the matter. It leaves no doubt about its insistence that moral principles must guide the process of economic analysis and must condition all economic doctrine. Through papal encyclicals and clerical writings it has gone far to enunciate in no uncertain, though calmly argued terms the ethical principles which it considers to be unqualifiedly relevant to economic thought.

Thus, the reader finds himself confronted with two alternatives. He may, if he is Catholic, accept the authority of his Church in the matter. On the other hand, if he is not Catholic, he may calmly examine the reasoning which is everywhere present in the generous quotations from Catholic sources which the author presents throughout the book. If he does the latter with an open mind, alert and receptive to truth and fortified against the inhibitions of prejudice, he is almost certain to perceive the universality, the true catholicity, or if he prefers, the ecumenicity of the ineradicable relevance of moral principle to economic method and doctrine. Moreover, he can scarcely escape a convinced assent to the validity of the specific moral principles advanced in Catholic sources. If he needs still more support, Father Dempsey supplies it in his last chapter by demonstrating that a considerable number of impressive and widely respected writers, who are not Catholic, do subscribe to these very principles because they are fundamentally and universally true, at all times, in all places, in all circumstances, and for all men.

Because the apparatus of economic analysis is often either inadequately or ineptly applied so that conflicting interpretations of the same phenomena may result; because economic doctrines which were more or less valid at the time and place of their emergence sometimes persist when they are no longer valid so that an incongruous set of beliefs may actually be operative in the functioning of an economy; and because there is often either a determination to exclude from economic thought basic moral criteria which apply to all social situations or an effective conflict of the moral views of the persons in a functional economy so that the total effect, both in theory and in practice, tends to be disharmonious, however tolerable, Father Dempsey applies to his first chapter the somewhat indicting but nevertheless accurate title, "Biography of an Unsatisfactory Science."

The perhaps seemingly disproportionate attention of this review to the seventeen pages of the first chapter of *The Functional Economy* is, in the reviewer's opinion, justified for at least two compelling reasons. The first chapter, if only by implication, supplies certain premises, vital to the treatment of the author's problem, the importance of which becomes apparent only with a reading of the whole book. Moreover, the author's abrupt introduction in the first chapter of references to a papal encyclical and to Aquinas may distract the reader who is not prepared for such references and who may be further disturbed by accumulating references to these and similar sources in later chapters.

Chapter 2 provides a quick review of the meanings of basic terms in the common language of economists: goods, services, utility, natural resources, capital, economic choice, cost, margin, money, the price system, monopoly, institutions, national income, income statistics. This expository glossary serves the useful purpose of enabling the reader

whose familiarity with economic terminology either has not developed or has receded from memory to acquaint or refresh himself with the denotations of these ingredients of the economist's conceptual apparatus. It also establishes the author as one who accepts and operates with a technical terminology which is current in his profession.

In Chapter 3 Father Dempsey proceeds from the content of Chapter 2 by reviewing briefly the economic processes of production, distribution, exchange and consumption. He reminds the reader that the achievement of a satisfactory set of relationships between these closely connected processes requires a stable, though of course not permanently fixed socio-economic order so that they may be coordinated and kept in reasonable balance or equilibrium. Important elements of the economic order in the United States are the institution of private property, qualified adherence to the French Liberalist doctrine of *laissez-faire* which contends that free individualistic competition is the natural equilibrating force in an economy, the assumptions of both Ricardo and Marx that the economy is divided into classes and that the interests of the laboring class and of the propertied class (the "capitalists") inevitably are in perpetual conflict with each other, and a considerable amount of Mercantilistic regulation and restraint through governmental control. That these elements are by no means completely consistent with each other and to some extent reflect unfounded beliefs is both obvious and important. Because they are all significant elements of our socio-economic order, and because they are partly incongruous and partly even untrue, this order is not easily described and its meaning is not easily communicated. There is clear evidence of at least a notable degree of institutional and doctrinal confusion; and there is a beckoning opportunity, if not an urgent need for the advancement and promulgation of an order-producing principle which, though fundamentally sound is yet sufficiently indigenous to support a confidence in its capacity effectively to operate toward the gradual dissolution of the incongruous and untrue ingredients of our economy and the substitution for them of a set of beliefs which are true, acceptable and integrative and which lead to a functional order characterized by vigor, social awareness, and the lasting as well as satisfying quality of socially responsible freedom. Toward the construction of such a principle the author, in the latter half of this chapter, introduces the reader to a basic and germinal idea which is elaborated in later chapters, the idea of social justice.

Chapter 4 sketches the recent history of papal encyclicals dealing with social and economic questions and culminating in the *Quadragesimo Anno*, "Restoration of Social Order" of Pius XI, in 1931. The author is careful to emphasize that these documents are based on "only natural truths and logical reasoning," that they propose only general principles and not detailed rules, that they in no degree invade the area of purely objective economic analysis, and that they are directed to the relationship of moral principles to the ends of economic acts by men. While it is the province of economists to say how a particular end may be achieved, it certainly is the proper sphere of the moralist to say whether the end is right or wrong. Since it will always be one or the other, and since the economic agent can never free himself of moral responsibility for his acts, the economist and the business man can scarcely deny the relevance of moral principles to economic principles, especially when the latter are applied to economic policies and institutions.

The author employs his fifth chapter for a resume of the nature and history of medieval guilds and an evaluation of them as means by which economic order was fostered through their control over economic functioning. The guilds expressed the principle of community interest; they were associations in which persons of similar interests came together to deal with their problems by communal processes. Father Dempsey's conclusions about the guilds are interesting and significant. "The principle of their organization is sound," "The void that their ultimate extinction left has never been filled, and the complete absence of a common way of life among moderns makes it a fair question whether or not there is a sufficient substratum of natural virtues to enable people to get together on an associational basis to fill that void." "Yet, if we cannot find some reasonable principle for common action, it still is true that 'all the crafts will be destroyed' and 'the community will not be maintained.' Here we have at least a suggestion of the kind of implementing principle which the book is to propose for carrying out the basic social principle inferentially suggested in the preceding chapter.

Since the restoration of a sound socio-economic order is gradually emerging as the central integrating theme of this book, the author appropriately inserts a sixth chapter on the historical preludes of disorder. These include the Protestant Reformation, the Commercial Revolution of the fifteenth and sixteenth centuries, the so-called Industrial Revolution, the financial revolution with its development of banking and credit, the political revolution in England (1688) whose emphasis upon individual rights left a strong impress on American tradition, and the French revolution of 1789 whose totalitarian features are more and more finding a place in our own economic order.

Chapter 7 has an important bearing upon the aim of the book. It contains a critical analysis of both the liberalist theory and the socialist theory of economics. From the liberalist point of view, the economy is controlled by rigid economic laws which operate effectively to produce an economic equilibrium if they are left undisturbed by social intervention and if individuals are left free competitively to pursue their own self-interests. In its Ricardian development, this theory assumes a class conflict between those who control land and capital and those who furnish labor, the incomes of the latter being held at subsistence levels. The socialist theory of Marx and Engels asserts that labor is the sole cause of product value, that the distribution of any portion of the product of labor to "capitalists" is simply an appropriation which reflects and sustains class conflict, that materialistic development determines the actions of men, that an inevitable revolution will dispose of the institution of property and so establish a just economic and social order. Father Dempsey points out the persistence in modern economic thought and practice of belief in the efficacy of individualistic competition as a regulator of the economy, and undertakes to expose the logical and practical fallacy of this doctrine. Moreover, he makes the disconcerting but undoubtedly accurate observation that the Ricardian and Marxian assumptions of class conflict underlie a substantial portion of modern economic behavior. The author fully acknowledges the value of free competition but not as a satisfactory regulator of the economy, and not when its object is simply the self-interest of the competitor, but rather when it is directed to the common good, that is,



when it is a socially sensitive, socially directed and socially responsible kind of competition. He proceeds to make a convincing case for the real dependence of a good order upon cooperation among those who control the application of the factors of production. Moreover, while he recognizes class conflict as an observable fact, he effectively disposes of it as either a necessary fact or a valid assumption.

In Chapter 8 the author examines the concept of "capitalism." He concludes that there really is no such thing as capitalism because the term simply does not lend itself to scientific definition. It is merely "what Marxists are against." Much better than to respond to Marxist propaganda by attempting to defend the undefinable would it be to concern ourselves with the best utilization of the institutions we have adopted and, though often for very uncertain reasons, believe in.

Basic among these institutions is that of private property. Its meaning and implications Father Dempsey carefully scrutinizes in Chapter 9. Property is a natural right because it is essential to the nature of man. The resources of nature, which man did not create, and from which together with human intelligence and effort all economic goods and values (including capital) originate, are destined for the accommodation of the needs of all men. Assurance of access to the resources of nature and to the products derived from them by economic effort requires the right of ownership. The expression of this right leads to an efficient use of natural resources and to a cooperative and peaceful social order, provided the objects of property are justly used by those who own them. A just utilization of the objects of property -- whether in their raw or natural state or some derived or modified form -- requires the observance of both their individual and their social significances. This means that those who own the land must, through the process of exchange, make its products or productivity available to those who do not own it; that those who own capital are bound, by the nature of things, to use their capital for the common good. All this is true, partly because all material goods originate in the resources of nature to which all men have a natural claim, and partly because all men are by nature socially interdependent.

These principles are further defended and elaborated in Chapter 10, on Wealth and Commonwealth. Emphasis is placed upon the dual purpose of the property right, namely, to serve the individual and to serve the common good. Obviously, it is the nature of some objects of property to serve the individual, and of others to serve the common good as well as that of the individual who owns it. The latter concept applies especially to capital which is defined as "saved-up labor and worked-on resources combined." The division of goods among private owners is a natural arrangement whose purpose is the efficient, orderly and peaceful distribution of the resources of nature and their products among all men.

The task of identifying solid principles by which, in a modern money economy, the social significance of the institution of private property can be expressed in a satisfactorily practical manner is undertaken in Chapters 11 to 13. The application of the property right to the common good is made possible in a modern money economy chiefly through the medium of money wages, although it must be recognized that wage earners rightfully

expect also some important non-economic satisfactions from their occupations. A socially perceptive and socially sensitive use of the factors of production (land, labor and capital) demands attention, on the one hand, to the way in which these factors are productively applied and, on the other hand, to the distribution of their product among the factors. The most critically, though not the only important share is the one distributed to labor. The question here is not, what is the minimum share which will maintain the laborers at a level of subsistence just sufficient to enable them to continue to expend their efforts, but rather, what share is due the laborers so that their claims to the resources of nature will adequately be met?

To this difficult question Chapter 11 contributes an analysis of the elements that need to be considered, namely, the necessary support of the laborer, the conditions of enterprise (of the firm), and the common good as manifested by full employment. The same chapter also presents definitions of the basic types of justice. Commutative justice is the kind which occurs when in man-to-man relations, chiefly in exchange transactions, each renders to the other that which is due in strict equality, as participants in a contract or agreement. Distributive justice is the type which an organized community renders to its members when it distributes to each member that which is his due not according to strict equality, but according to some uniformly applied measure. General justice involves the relation of the individual to the individual and to the community. In its legal aspect, it is satisfied when the individual renders to the community that which is due it under positive law. In its contributive aspect, general justice requires the member of a community to render to it that which is necessary for the common good of the community. In the payment of wages, distributive justice as well as commutative justice ought to be observed -- not merely what is contractually required, but that which is due by standards other than simply what has been agreed upon. To be sure, the contract may define a distributively just wage. Conversely, both distributive justice and contributive justice may require going beyond the demands of commutative justice. Through distributive justice, supported by contributive justice, the property right operates for the common good.

The author further pursues the problem of the just wage in Chapter 12 by raising the pertinent question, does the ability of a firm "to pay higher wages in itself form the basis of a just title by which labor may demand higher wages?" The question is examined from both an economic and a moral point of view. Economically, it must be recognized that the price of labor, though it is not the price of a commodity, is bound up, nevertheless, with the entire price system of an economy. A wage is a cost to the payer and an income for the payee. Both aspects of wages collide in the market for the goods produced. From a moral point of view, it must be acknowledged that labor contributes not simply to an employer or to a firm but to an economic community of which laborers are a part. In contributive justice, they must "contribute to the common good of that society." What they contribute is not simply work, but their socially dependent selves. While their output (product) may have one exchange value, their input (their socially dependent selves and, indeed, inter-dependent selves) may easily have another and higher value. Merely



to satisfy the requirements of commutative (exchange) justice is not, therefore, sufficient. The requirements of contributive justice demand that the laborer receive "the means of living an adequate life as a human being." There may, of course, be instances where the condition of a firm does not permit a wage which is contributively just, but then such a condition itself represents an injustice. When, on the other hand, the requirements of contributive justice are met and the firm is able to pay even higher wages, it is not bound to pay them and labor has no claim upon them, the author reasons with much competent philosophic support, because the ability to pay has not been created by labor but by the enterprising skill of the employer.

The Worker as a Person is the subject of Chapter 13. The normal aims as well as the normal needs of a worker in his work are not adequately described in merely material terms. As a worker he is also always a person, a person who seeks, needs, and has a right to such non-material satisfactions as the feeling of belonging, status, security, confidence in managerial competence, group participation, etc. His dignity as a human being demands such rewards as much as a just money wage. The author acknowledges the inroads of "depersonalization" which result from industrial practices, labor union policies, and extensive state control and welfare measures in our economy, and points out their causes. He concludes, however, that the truly serious defect is not the extent to which "depersonalization" has occurred, but rather the extent to which the possibilities for personal recognition and personal growth in the economic pursuits of labor have not been appreciated, prosecuted and realized in the functioning of our economy. Toward the end of the chapter, the author presents an evaluation of profit-sharing as one means for personalizing labor.

Chapter 14 treats a principle which is extremely vital to the solution of the two central problems of this book -- the principle of subsidiarity. Man, an action-initiating, self-directing, self-controlling being, is propelled by a number of basic urges into actions by which he develops and perfects himself. These actions are directed to objects by which he satisfies his proper, that is, his personal needs. But, because he is by nature a social being, dependent upon others and they upon him, he also has needs which are not proper (personal) but which are social -- needs which are common to the members of a community and which require communal cooperation for their accommodation. In modern economic society, the individual belongs to many social groups -- the family, the business firm, the industry, the church, the civil community or state, etc. Some of these are contained within others. The only purpose of any more or less organized group is to serve its members in ways which its members are unable themselves to perform. The function of a community (any group or society) is described by the Latin word *subsidium*, which means aid or assistance. Hence, the purpose of a community can be expressed in a principle which is appropriately named "the principle of subsidiarity." Since, in terms of this principle, a community exists to aid its members to do what they cannot themselves do, a community must not assume for itself that which its members themselves can do. This means that a more comprehensive community, such as the state, must attempt only what more limited communities, unassisted by the larger community, are unable to

undertake, and they must not assume what the lesser communities can do. Thus, the state (government) violates a natural order when it takes to its itself what can and ought to be left to individuals or groups less comprehensive than itself. The moment the principle of subsidiarity is violated, the capacities, duties, and responsibilities of individuals or of limited groups also are transgressed. Communities, not simply civil but all kinds of groups with legitimate mutual interests are indispensable and have tremendous possibilities for good, but they must be assisting and not appropriating in aim and function.

At this point, the author of The Functional Economy shifts his treatment from critical analysis and the presentation of underlying principles to a constructive development of a unified and articulate set of proposals for the solution of the two problems to which this book is devoted. Of the remaining ten chapters, Father Dempsey identifies the fifteenth and nineteenth as the ones which contain the core ideas. Consequently, these two chapters will be emphasized in this review, while the other eight will be summarized quite briefly.

Chapter 15, The Basis of Functional Communities, is sharply focused upon two ideas which logically flow from the first fourteen chapters. These ideas "are, first, the Cooperation of Functional Communities and second, the Restoration of a True Principle of Direction into economic activity so organized." The author begins by referring again to the matter of class conflict in the United States, especially between employers and employees. That there are such conflicts at particular times and places, the author readily admits. That such conflicts exist between "two well defined and stable groups," the author denies. He points out that employees do share in capital ownership and that movement from one group to the other is unobstructed and fairly common. The two groups are not really antagonists; they are, in fact, a community of cooperative functional necessity. The two do function together in mutual dependence toward at least some important common ends, however much at times they behave in opposition to each other. By the nature of things, each firm and each industry represents a community of interest, an order, which is not, of course, confined simply to employers and employees; and all of these communities are the total economy, the total order. The two principles of contributive justice and subsidiarity would require each of these orders to seek the common good, not only of its own but also of the whole set of orders, so that thereby, through the process of exchange, the common good of the total order may be achieved. The central and overwhelmingly important task is then to foster the development of a functioning community belief within firms, within industries, and perhaps also within other economic groups having common interests which can and ought to be communally served. This is the natural and, therefore, the logical and right approach to the achievement of a good socio-economic order. This concept rules out the unnatural and unsocial yielding to the state or the appropriation by it of functions which other lesser or more limited communities are perfectly able to perform if only they are permitted and encouraged to assume and implement the responsibilities which naturally rest upon them. It rules out no less certainly the doctrine of purely individualistic competition. Father Dempsey then proceeds to demonstrate that this idea of "multiple communities" is entirely feasible, that it has

its precedents in modern as well as in former experience, and that it is subscribed to by a number of influential and respected modern writers, Catholic and others. In answer to the question, "what would such an order look like," the author insists that it cannot and must not be rigidly blue-printed; that adaptive experimentation with the implementation of the principle is necessary, and that such communities must, as Professor Selekmán in his later book also advocates, be governed by charters and ordinances. Father Dempsey acknowledges the need to avoid monopoly and the restriction of movement between economic communities, as well as the need to preserve a healthy competition. Yet, because the basic principle is sound, the inability of anyone at this time to propose a definite pattern of implementation or to offer solutions for all of the problems which would attend an implementation should not discourage a determined effort to create such functional communities in our economy. The suggestion is unmistakably implicit in the author's exposition that the only other alternative is the certain attrition of a natural and socially responsible freedom with the precipitation of an intolerable economic order through internal conflict and confusion or through excessively extensive and penetrating state absorption of individual and community responsibility.

The content of Chapter 16, titled Growth in Functional Organization, is largely a "summary of previously developed notions." Cogent thoughts in preceding chapters are brought together to form a clearly discernable pattern of argument. The upshot of the latter is the idea that both reason and experience show that the kind of economic order which best fits the social nature of man is one in which variously organized, self-generating, self-governing and adaptively functioning communities of interrelated and interdependent economic interests, imbued with the spirit of justice, are a major institutionalized (that is, commonly accepted) feature of society. How such an order should actually be structured, the author points out, will depend upon considerations of economic and philosophic harmony, of social and political practicability, and of purely economic rationality.

In Chapter 17, the author analyzes the concepts of competition and monopoly in relation to the type of economic order which now exists. The doctrine that the competitive pursuit of profit is the first principle in the modern economy is dismissed as one which, because it was derived from assumptions of small and relatively static producing units mechanistically controlled by inexorable market forces, no longer fits the realities of today's economy; and which, because it is individually centered and not socially centered, is not morally defensible. This is not at all the equivalent of saying that there is no competition and no profit seeking today or that the two phenomena are not, within limits, desirable and good. In the United States, competition is vigorous and innovational; and it is profit-seeking. On the other hand, because many of the competitive units are quite large and not small, and because their survival depends upon socially wise decisions by the managers of such firms and of labor unions there is in some degree at least an inescapable concern about the common good. It is the latter motivation which needs to be promoted by widespread acceptance of the soundness of the principle of contributive justice and by a resourceful but judicious implementation of this principle through the development of economic communities functioning toward the common good. The inclination of economists to rely upon market competition for

the maintenance of equilibrium in an economy has been significantly qualified by the necessary acknowledgement that entrepreneurs do in many instances make choices of their own which are not forced upon them by markets, "without suffering fatal economic penalties." Competitive markets do not determine all decisions. Free decisions, even by monopolists or oligopolists can be quite benign so long as they direct the application of the factors of production to the common good.

Chapter 18 examines the role of the entrepreneur in economic society. He, the enterpriser, as differentiated from the supervisor or the manager, is "the innovator, the spearhead of progress." He disturbs the economy which except for him would be stable, static, without profit, and without interest. But his intellectual and economic drives stimulate the economy and energize it to a dynamic and expanding utilization of land, labor and capital from which society, despite the risks and mistakes of innovation and movement, does enjoy a net benefit, materially and otherwise. The significant point in the chapter is the observation that the ability of the functioning economy progressively to serve the common good depends, in the last analysis, upon the precious ingredient of individual initiative. The exercise of initiative need not be limited to entrepreneurs as such; it can be encouraged to exhibit itself also in workers. "The thesis of this book is that the virtue of contributive justice is the one objective basis for the functional coordination of free persons without their coercion from without by the state."

As previously indicated, Chapter 19, The Basic Principle of Functional Organization, is singled out by the author as one which, along with Chapter 15, presents the core ideas of the constructive portion of the book. Union, justice, tranquillity, general welfare -- famous words in the Preamble of the Constitution of the United States -- are not simply rhetorical embellishments of a legal document; they are the keenly discerned interrelated elements of a naturally fitting social order. In a society, all men are both equally and interdependently ordered to one end, God. They live under laws -- civil, natural, divine, and supernatural. Because they are coordinated, they must, under these laws, act to the common good; and they must do so in groups or communities which are essential to man. Within such communities, the guiding and pervading principle must be the virtue of justice, the rendering to each his due. This principle, which in its various forms was explained and supported in earlier chapters of the book with special emphasis upon contributive justice is now reaffirmed but with more explicit application to the functional members of a modern economy. Although the obligations of social justice fall with particular gravity upon those who, through property or management, largely direct the economic processes and upon those who furnish labor or manage its unions, they are also incumbent upon "all members of the community, precisely because they are members of the community." In all of these, the "first obligation in social justice is not to think up things which it binds other people to do, but to ask ... what contribution can I make to the common good, what does the general welfare demand of me here and now?" Social (i.e., contributive) justice, implemented through appropriate and responsible economic communities, is "the dynamic virtue of economic society" without which "sanity and right order will not be restored in industrial communities." It is the "guardian of efficiency,"

the "guardian of economic institutions," the "unifying principle of the functional municipalities" (i.e., economic communities) and the "antidote for class conflict." The productivity of nature is increased by the division of its resources as private property among men; and, likewise, the productivity of labor is enhanced by the occupational division of labor. But this increased productivity proceeds from knowledge and it becomes realized only when it is shared, that is, when through exchange it is directed to the common good -- consciously, purposefully, and primarily. "The urgent present obligation of Americans is so to practice the virtue of contributive justice that it becomes truly a regulative principle of economic life, governing men and things to the common good, and this independently and antecedently to the action of the civil state. The flowering of functional communities (orders) which will achieve this end in a way expressive of and sympathetic to American traditions will have a great influence upon the management of private property. To this task of molding new structures of social institutions, the state has only an extrinsic part to play. The better social order will be principally the work of a shared knowledge and of a social cooperation expressive of mutual love."

In the next three chapters (20, 21 and 22) Father Dempsey closely examines the nature of and the relevance to the argument of his book of the institutions of money, price and credit, the moral and economic aspects of just prices, usury and inflation. Since attention to these matters does not advance the central theses of this book but constitutes, rather, a digression into specific though not unimportant problems, a review of the author's treatment of them can be avoided for the sake of brevity.

Chapter 23 is devoted to an appraisal of the extent to which Catholic social thought has influenced economic thought and action, especially in the United States since World War II. The author concludes that while there has been substantial progress in the functioning of the American economy, and while men have not been unmindful of justice even in the economy, the central principles advanced in this book have not had nearly the influence which, on their own intrinsic merits and for the common good, one would wish them to have had. Father Dempsey explains this by suggesting that the meaning and the practical values of these principles too often have either escaped the minds of Catholics or have been ignored by them; and that Catholic scholars and practitioners have failed to devote sufficiently concentrated and cooperative study to the problem of restoring a rightly-principled socio-economic order. To this explanation the reviewer ventures to add a conviction of his own. It seems to him that since Catholics cannot alone either promulgate or implement the impressively sound socio-economic philosophy which has come to them, but must to an even greater extent than upon themselves depend upon others who are not Catholic, the greatest error of their scholars has been their failure convincingly and considerately to communicate, on its own merits, the content of their social philosophy to those who are not in their own fold of theological acceptance.

The 24th and final chapter of The Functional Economy quotes and draws together the thoughts of many prominent Western scholars and writers in an impressive emphasis upon "the indisputable primacy of personal impulse and responsibility in social life." The author quotes from David



McCord Wright, Russell W. Davenport, and Walter Lippmann to point out that the absence in America, among intellectuals and business men, of agreement on a basic economic philosophy prevents us from understanding our own economic greatness, from confidently supporting its survival, and from interpreting its meaning and values to other nations. While Americans "have come a long way toward the empirical practice of contributive justice, subsidiarity, and functional economy," they continue to pay lip service to the worn-out doctrines of Ricardo and Marx; and they have not come nearly far enough in the development of an "explicit American economic philosophy based on the notion of responsibility and contribution." These conclusions are supported by the searching analyses of Donald K. Davis, John Maurice Clark, and others. But American scholars who have discerned our fundamental socio-economic problem are not content simply to be critical. The constructive analysis of respected writers such as Peter F. Drucker, Kenneth Boulding, Howard R. Bowen and Elizabeth Hoyt, as well as those of David, Clark, Davenport, and Lippmann lead independently to substantially the same conclusions as do the minds of Catholic thinkers, namely, that a sound social philosophy of individual responsibility and contributive justice must find expression in the free and spontaneous growth of functioning economic communities. These views are receiving growing support by business associations and by individual business men. Father Dempsey's book is by no means simply the echo of lone voices crying in an intellectual wilderness of confusion or indifference. The author is heartened, as all men of good will may well be, by the following observation. "When men of varied ages and backgrounds arrive at such compatible conclusions from such diverse approaches to such complex data, the conviction grows that objective evidence lies behind their conclusion."

\* \* \* \* \*

Eleven of the fourteen chapters of *The Functional Economy* are either partial or complete reproductions of articles by Father Dempsey which have appeared in a number of professional journals and in one book. As a consequence, *The Functional Economy* leaves something to be wished for in continuity of style and content, though not in unity. There is a considerable amount of overlapping of material which cannot, however, be fairly criticized as duplication. With these defects, the reader will gladly be patient when he permits himself to be rewarded by the outstanding and enduring value of this book as a most significant contribution of truly scholarly thought about the pressing problems of our national economy; and when he remembers that he has before him the work of a man whose relentless and unsparing commitment to the service of man drove him to employ his exceptional competence as economist and moral philosopher for the common good as widely and fruitfully as possible before his failing health should claim his life.

Walter F. Gast  
Professor of Business Administration

## CONSUMER INSTALMENT CREDIT IN THE 1960's

James C. T. Mao\*

By the end of 1969, when we look back at financial developments during the 1960's, we may find that the amount of instalment credit outstanding has now increased by more than \$40 billion. This increase of some \$40 billion over the next ten years implies a rate of growth of 7.3 per cent, compounded annually. But how will this rapid growth be possible in view of the fact that credit outstanding is already at an all-time high of \$39.4 billion, and repayments are already taking close to 13 per cent of disposable personal income? To answer this question, let us first obtain some perspective on the matter by examining the record of instalment financing from 1920 to 1959. While history does not necessarily repeat itself, a study of the past often reveals underlying trends which may be useful in forecasting possible future developments.

### I. The Record of Growth, 1920-1959

Consumer instalment credit has constituted a growth industry in our economy for several decades. The amount of such credit outstanding grew from less than \$1 billion at the end of 1920 to \$39.4 billion at the end of 1959. As can be seen from Chart I, this increase of \$39 billion during a period of nearly four decades was not achieved smoothly, without interruptions. Rather, the upward trend was marked by two serious interruptions -- one during the Great Depression and the other during World War II. During each of the separate periods of expansion, instalment credit grew at annual rates ranging from 11 to 15 per cent. Taking 1920-1959 as a whole, instalment credit grew at an average yearly rate of slightly more than 10 per cent.

This expansion has been remarkably uniform for the various types of instalment credit. Instalment credit is divided by the Federal Reserve into automobile paper, other consumer goods paper, repair and modernization loans, and personal loans. As the data in Table I reveal, all four components of instalment credit experienced roughly the same percentage rate of growth during the period 1939-1959 -- the only years for which the Federal Reserve has released such statistics. However, because of its absolute size, automobile credit accounted for nearly 44 per cent of the total increase.

-----

\* Dr. Mao is Associate Professor of Finance and Director of Research, Consumer Instalment Credit Study. This paper was Presented on September 10, 1960, at the "Challenge of the 1960's" conference sponsored by the Michigan Credit Union League in cooperation with The University of Michigan Extension Service. The views expressed represent those of the author and not necessarily those of the above-named organizations.



TABLE 1

GROWTH OF CONSUMER INSTALMENT CREDIT  
December 31, 1939 - December 31, 1959

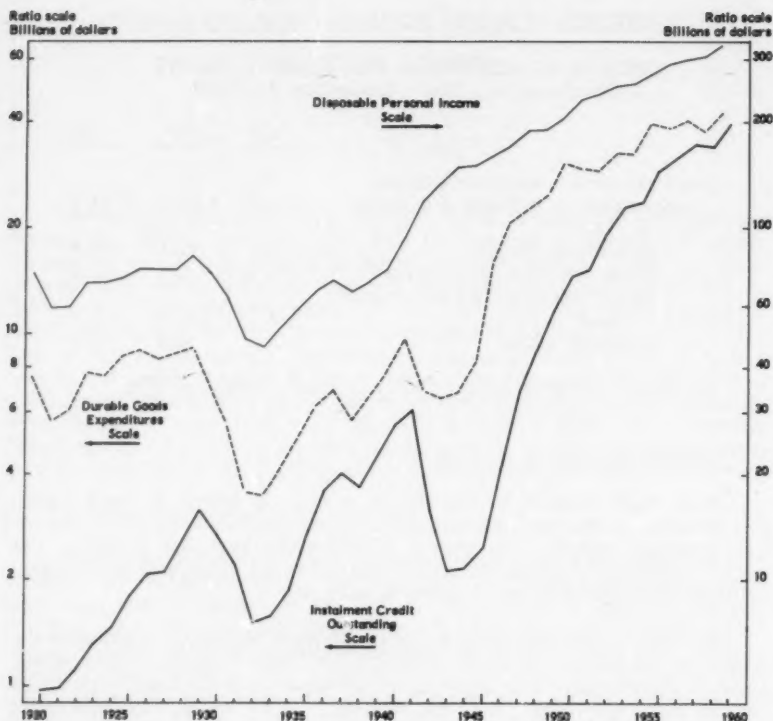
	1939	1949	1959
Total consumer instalment credit outstanding (in billions of dollars)	\$4.5	\$14.7	\$39.5
Automobile paper	1.5	6.1	16.6
Other consumer goods paper	1.6	4.8	10.2
Home repair and modernization loans	0.3	1.0	2.7
Personal loans	1.1	2.8	9.9

SOURCE: Federal Reserve Bulletin (June, 1960), p. 674.II. Underlying Factors of Growth

This rapid growth in instalment credit is indeed a remarkable phenomenon. It has been brought about by the operation of three underlying factors, namely, the growth in disposable personal income, the income-elasticity of consumer durable goods expenditures, and the changing attitudes of consumers and lenders toward debt.

Of these three underlying factors, the most strategic perhaps is the growth in disposable personal income. As Chart I shows, there exists a fairly close relationship between the movements in disposable personal income and instalment credit outstanding. This close relationship is easily explained. As aggregate income rose, many consumers for the first time in their lives moved into income brackets where they could afford to buy those major durables which typically involve instalment financing. Other consumers, finding their surpluses over and above basic expenditures larger than ever before, discovered that they now could afford the second or third car which they could not afford five years ago. A rise in income leads to an increase in consumer durable goods expenditures, which in turn leads to an increase in the demand for instalment credit. The observed relationship between disposable personal income and instalment credit outstanding, therefore, is what one would expect on the basis of elementary economic principles.

A close correlation exists between disposable personal income and instalment credit outstanding, but an even closer relationship exists between credit outstanding and consumer durable goods expenditures. (See Chart I. This is because instalment credit is used largely to finance the purchases of automobiles and other durable goods. Thus, as Table I reveals, close to 75 per cent of the instalment credit outstanding represents automobile and other consumer goods paper, and only 25 per cent represents personal loans. Chart I also reveals that between 1920 and 1959 consumer durable goods expenditures rose faster than disposable personal income. The explanation for this lies in the fact that consumers are not even likely to think about spending on durables when their incomes



SOURCES: For 1920-1957, Board of Governors of the Federal Reserve System, *Consumer Instalment Credit*, Pt. 1, Vol. 1, Chart 33 (Washington, D.C., 1957), p. 326; for 1958-1959, Federal Reserve Bulletin (June, 1960), pp. 674, 692-3.

are just adequate to cover the basic needs of life. But once there is a surplus over these basic needs, consumers tend to spend a greater and greater percentage of any such surplus on durables. This elasticity of consumer durable goods expenditures with respect to changes in income is the second major factor behind the phenomenal growth in instalment credit.

While the upward trend in consumer durable goods expenditures offers a good explanation of the upward trend in instalment credit, the explanation is not entirely satisfactory. For, as Chart I clearly shows, instalment credit has grown quite a bit faster than consumer durable goods expenditures. Between 1920 and 1959 the yearly growth rate for expenditures on durables was 4.5 per cent, as compared with the 10 per cent rate mentioned earlier for growth of instalment credit. Now, if the percentage of durable goods purchased on credit and the down payment

and maturity structures remain fairly constant during this period, one would expect instalment credit to increase at substantially the same rate as expenditures on consumer durables. But we know that over the years, (1) consumers have been buying a greater and greater portion of their durables on credit, and (2) both terms and down payment structures have loosened considerably. To cite just a few statistics, average maturity and down payment on new car financing averaged 12 months and 33-1/2 per cent, respectively, in the 1920's; they averaged 36 months and 20 per cent in 1959.<sup>1</sup> Last year, consumers made roughly 65 per cent of their new car purchases on credit; the figure was only 46 per cent in 1949.<sup>2</sup> The percentage of credit purchases in the early 1920's must have been considerably lower than either 1949 or 1959. These developments -- the increased use of credit, longer maturity, and lower down payment -- are the reasons that instalment credit grew faster than consumer durable goods expenditures.

It should be pointed out that the above developments reflect a basic change in the attitudes of borrowers and lenders toward instalment debt. Today's consumer borrowers, unlike their grandparents, do not feel that there is anything morally wrong in buying on instalment credit. In fact, most consumers view instalment buying as a good practice, because it enables them (1) to buy many of the important things now and (2) to consume these things on a pay-as-you-go basis.<sup>3</sup> The attitudes of lenders, too, have been changing. The excellent performance record of consumer borrowers over the years has made lenders more receptive to this form of lending, more willing to accept longer terms and lower down payments. This basic change in the attitude of borrowers and lenders is the third factor which we mentioned earlier; along with the increase in income and consumer durable goods expenditures, it accounted for the spectacular growth of instalment credit during the past decade.

### III. Prospects for Future Growth

We have studied the record of instalment credit growth and explained this growth in terms of certain underlying factors. The questions immediately arise: With what degree of intensity are these underlying factors likely to operate in the future? And, are there likely to be new developments which will either accelerate or decelerate the future growth of instalment credit?

There are strong reasons for believing that instalment credit will continue its growth, but at a lower percentage rate than in the past. In the first place, disposable personal income is likely to keep growing, and

- 
1. Data for 1920's from Board of Governors of the Federal Reserve System, Consumer Instalment Credit, Pt. I, Vol. 1, (Washington, D.C.: Government Printing Office, 1957), p. 27.
  2. Federal Reserve Release, R & S - 2252.
  3. George Katona, The Powerful Consumer (New York: Mc-Graw-Hill Book Company, 1960), p. 100.

along with it consumer durable goods expenditures and instalment credit outstanding. However, 1960 differs from 1920 in that consumer durable goods have already attained a well-established place in the economy. Take, for instance, the stock of automobiles. In 1920 there were only 250 cars per thousand households; today, there are nearly as many cars as households.<sup>4</sup> It is easier to double or triple your automobile stock when there is only one car per every four households than it is when every household has a car. Besides the growth in income, term and down payment will in all probability loosen even more. But as we mentioned earlier, on a typical new car financing maturity is already as long as 36 months and down payment as low as 20 per cent. Any further loosening in maturity and down payment is likely to be both slower and more moderate than what was accomplished during the past decades.

But are there not developments in the making which tend to accelerate the future growth of instalment credit? In this connection, we must consider a new technique in personal cash instalment lending, namely, the revolving check-credit plan. According to an estimate made last fall, 100 or more banks then had check-credit programs, and the number has been increasing rapidly during the past year.<sup>5</sup> To an important degree, however, the check-credit device merely replaces the more traditional forms of instalment financing. Therefore, while this form of credit may be expected to grow, its growth is not likely to affect significantly the overall increase in instalment credit.

In the light of this discussion, the conclusion seems warranted that the percentage rate of growth in instalment credit will slow down in the years ahead. It should be noted, however, that a declining percentage rate of growth is not incompatible with a rising absolute rate of increase. The numerical projection of instalment growth developed in the following section helps demonstrate the possibility of such an increase.

#### IV. A Numerical Projection of Instalment Credit Growth

The figures in this section represent a projection of the level of instalment credit outstanding in 1970, based on a set of specific assumptions. The method used in making the projection may be called the "component" method in that automobile credit and other instalment credit are estimated separately. (See Table 2.)

According to our projection, during the coming decade automobile paper will rise to \$26.7 billion and other instalment credit to \$53.7 billion, giving us a total instalment credit outstanding of \$80.4 billion by early

-----  
4. Based on data in Automobile Facts and Figures: 1959-1960 Edition (Detroit: Automobile Manufacturers Association, 1959), pp. 18, 35; National Economic Projections, 1962-1965, 1970 (Washington, D. C.: National Planning Association, 1960), p. H-30.

5. Federal Reserve Bank of Chicago, Business Conditions (January, 1960), p. 5.

TABLE 2

ESTIMATED CONSUMER INSTALMENT CREDIT  
OUTSTANDING IN 1970

## Automobile Credit:

Step 1	1955 <sup>1/</sup>	1957 <sup>1/</sup>	1959 <sup>1/</sup>	1970 (Projections)
Total households (millions)	47.9	49.9	51.4	61.4
Car-owning households (millions)	35.2	36.5	38.2	49.1
Per cent of households owning cars	73.5	73.0	74.3	80.0
Multi-car households (millions)	4.8	6.2	7.0	12.3
Multi-car households as a per cent of car-owning households	13.8	16.9	18.3	25.0

Step 2 Estimated stock of automobiles -- beginning of 1970 --  
61.4 million cars

Step 3 Estimated automobile credit outstanding  
beginning of 1970, after adjustment \$26.7 billion

## Other Instalment Credit:

Estimated amount outstanding, beginning of 1970 \$53.7 billion

Total Estimated Instalment Credit Outstanding, beginning  
of 1970 \$80.4 billion

<sup>1/</sup> Data for 1955, 1957, 1959 from Automobile Facts and Figures: 1959-60 Edition (Detroit: Automobile Manufacturers Association, 1960) p. 35.

1970. This is how the estimates are made.<sup>6</sup> In 1959, 74.3 per cent of the 51.4 million American households owned cars; moreover, 18.3 per cent of car-owning households owned two or more cars. By the end of 1969, there will be approximately 61.4 million households, 80 per cent of which will own cars. Moreover, of these car-owning households, those owning two or more cars may be expected to rise to 25 per cent. On the basis of these assumptions, the total number of cars owned by consumers may be expected to increase from the present figure of 45.8 million to 61.4 million by 1970.

Now, as of year-end 1959, automobile paper outstanding stood at \$16.6 billion. If down payment, maturity, price of car, and use of credit

6. The data used in our projection came from the following sources: automobile ownership, Automobile Facts and Figures: 1959-60 Edition (Detroit: Automobile Manufacturers Association, 1959), p. 35; projected disposable personal income and number of households, National Economic Projections, 1962-1965, 1970 (Washington, D. C.: National Planning Association, 1960), p. H-30.

remain constant, a stock of 61.4 million cars in 1970 indicates that automobile paper will reach \$22.3 billion in ten years. Such an increase would maintain the same relationship between automobile credit and stock of cars in 1970 as in 1959. We should, however, adjust our estimate upward by 20 per cent to allow for some further increase in the price level and some further loosening in down payment and maturity structures. Our final estimate for automobile paper, therefore, is \$26.7 billion by 1970.

Instalment credit other than automobile paper stood at \$22.9 billion at year-end 1959. Ideally, we should use the same technique in forecasting other instalment credit as we have used for automobile credit. Lack of certain necessary statistics, however, forces us to resort to simpler techniques. Fortunately for our projection, available data for the 1950's reveals that there exists a fairly stable relationship between other instalment credit outstanding and disposable personal income. Generally, every hundred dollar increase in disposable personal income during the last ten years has been accompanied by roughly eleven dollar increase in other instalment credit outstanding. During the next decade, disposable personal income in current dollars may be expected to increase by \$296 billion. If past relationships hold, this increase in disposable personal income is likely to be accompanied by a \$30.8 billion increase in other instalment credit outstanding. Our final estimate for other instalment credit, therefore, is \$53.7 billion by 1970. Adding this figure to the estimated volume of automobile paper, we arrive at \$80.4 billion as the projected total outstanding for all forms of instalment credit.

It is perhaps unnecessary to point out that our estimates are only as accurate as the assumptions used in their projection. For this reason, we have presented our projection in such a way that the reader can easily modify the findings if his judgment leads him to use a different set of basic assumptions.

#### V. The Question of Consumer Debt Burden

Our analysis will be incomplete if we do not find out what our projection means to consumers in terms of the burden of future repayments. One of the most frequently used measures of consumer debt burden is the over-all ratio of repayments to disposable personal income. Our projection reveals that instalment credit and disposable personal income during the next decade will grow at annual rates of 7.3 per cent and 6.5 per cent respectively. If this forecast should prove accurate, repayments on instalment debt will amount to 14 per cent of disposable personal income, as compared with the current 12.9 per cent figure.

Are repayments amounting to 14 per cent of disposable personal income an excessive burden on the consumer sector as a whole? Is our projection of outstanding instalment credit realistic in terms of the proportion of their income which consumers are willing to commit to instalment payments? This is not an easy question to answer because it involves the difficult problem of a repayments' ceiling. Theoretically, there must be a limit on the extent to which current income can be diverted to instalment repayments without seriously disrupting consumers' normal spending habits. But whether this ceiling is reached at 13 per



cent, 14 per cent, or 15 per cent is a question which cannot be answered on a priori grounds alone. Perhaps history will furnish us with the answer to this interesting question.

There is, however, one observation relating to consumer debt burden that we can make with a fair degree of certainty. It would seem that the over-all ratio of repayments to disposable personal income is not the most accurate measure of debt burden. Repayments on instalment debt obviously constitute a burden only on those spending units making the payments. A more accurate measure of debt burden, therefore, is the ratio of repayments to the disposable income of indebted spending units. We know that a growing percentage of total spending units are going into debt. Therefore, the projected increase in the over-all repayments-to-income ratio from 12.9 per cent to 14 per cent in all probability overstates the true increase in the burden of consumer instalment debt.

## VI. Summary and Conclusions

In view of the above discussion, we can draw the following conclusions regarding the long-term growth of consumer instalment credit:

1. The spectacular growth in outstanding instalment credit from 1920-1959 is attributable largely to three factors: namely, the growth in disposable personal income, the income elasticity of consumer durable goods expenditures, and the changing attitude of lenders and borrowers toward debt.

2. Consumer instalment credit will continue to grow, although at a lower percentage rate than that of the past.

3. According to our estimate, consumer instalment credit may reach a level of \$80.4 billion by 1970. This projection implies an annual increase of 7.3 per cent during the next ten years, as compared with 10 per cent during 1920-1959. It also implies an annual average increase of slightly more than \$4 billion, as compared with an annual average increase of \$2.5 billion during the 1950's.

4. And, finally, of the projected \$40.8 billion increase in total instalment credit outstanding, about one-fourth will be in automobile paper and three-fourths in other instalment credit.

-----

7. According to the Survey Research Center at The University of Michigan, 42.6 per cent of total spending units had instalment debt repayments in 1954; the corresponding percentage for 1960 is 47.7 per cent.



## **ECONOMIC GROWTH - THE 'SIXTIES VERSUS THE 'FIFTIES**

Stanley L. Rewey\*

Much has been written about the so-called "Soaring Sixties." To the average person, it appeared that at the stroke of midnight, December 31, 1959, our economy would automatically take off on a great upsurge, the likes of which the world had never seen. Economic growth, it seems, has become a self-evident truth along with life, liberty and the pursuit of happiness.

Economists and businessmen who are bullish on the decade of the 'Sixties seem to be divided into two groups, those who feel that economic growth in this decade will exceed that of the 'Fifties in terms of dollars and those who feel that such growth will exceed that of the 'Fifties percentage-wise. Since the percentage growth of the Fifties is based on the statistics of the year 1949, while those of the 'Sixties will be based on the considerably higher figures of 1959, it is, of course, apparent that to equal the percentage performance of the 1950 decade the present period will have to come up with much higher dollar gains. In this connection, it might be observed that most businessmen are well aware of the statistical paradox that a 100 per cent gain from 1 to 2 is quite different than the same percentage gain from 2 to 4 or from 4 to 8.

Since the 1950 decade is to be the standard of comparison for the purpose of this paper, it is important to have the economic record of this period clearly in mind. During that decade our Gross National Product went from \$258.1 billion in 1949 to \$482.1 billion in 1959, an increase of 86 per cent and a dollar gain of \$224 billion. It should be mentioned at this point that in terms of 1959 prices the dollar gain for the period was \$153.7 billion, or 47 per cent. However, because it is assumed that the inflationary aspects of the two periods will be approximately the same, we will talk in terms of actual dollars rather than constant dollars.

Another widely used measure of economic growth is Disposable Personal Income. This figure went from \$208.3 billion in 1949 to \$383.3 billion in 1959, a gain of \$175 billion, or 84 per cent.

Contrary to the contentions of certain presently campaigning politicians, these figures are impressive evidence of economic growth during the 1950's. Equally impressive are some of the components that helped make this growth possible. For example, during the decade approximately 12,165,000 non-farm housing units were built having a total value of approximately \$162.3 billion. To finance these homes, buyers increased the outstanding mortgage debt by \$93.4 billion, or 248 per cent. Total mortgage debt at the end of 1959 stood at \$131 billion.

-----  
\* Mr. Rewey is Senior Vice President of the Marshall and Ilsley Bank, Milwaukee, Wisconsin.

The nation's industries spent \$291.6 billion during the Fifties for new plants and equipment, while governmental expenditures for highways and other types of construction totalled approximately \$124 billion.

These are the economic accomplishments of the 1950 decade against which the performance of the 'Sixties will be measured.

Since consumer expenditures account for some 65 per cent of the Gross National Product, business activity of this or any other decade pretty much revolves around the ability and willingness of the consumer to spend money. Much of the success of the 'Fifties was due to a backlog of normal demand built up first by the depression of the 'Thirties, second by the war years, and third by lack of confidence in the late 'Forties when many people were expecting a postwar recession of the 1920-1921 type. Consumer confidence blossomed in the 1950's with the result that not only was current income readily spent but the consumer displayed a willingness, if not an eagerness, to go heavily in debt. As mentioned above, mortgage debt increased some 248 per cent to \$131 billion, and consumer credit swelled from \$17.3 billion in 1949 to \$52 billion in 1959, an increase of \$34.7 billion, or 200 per cent. These increases far outstripped the gain of 84 per cent recorded for total Disposable Personal Income.

Assuming that the general make-up of our economy in the 1960 decade will be about the same as in the 'Fifties, the following projection shows where our economy will have to be in 1969 to (1) equal the dollar increase of the 'Fifties and to (2) equal the percentage increase of the 'Fifties:

	To Equal Dollar Increase of 'Fifties	To Equal Percentage Increase of 'Fifties
Gross National Product - 1969	\$706 billion	\$896.7 billion
Disposable Personal Income - 1969	558.3 billion	605.2 billion
Level of Consumer Credit - 1969	86.7 billion	* 96.7 billion
Level of Mortgage Debt - 1969	224.4 billion	*243.6 billion

\* Assumes an 86 per cent increase, which is the same factor used for the Gross National Product.

The above two targets appear to be astronomical and without a substantial amount of inflation they would seem to be entirely unobtainable during this decade. The reasons for this conclusion are briefly as follows:

1. The backlog of demand caused by depression and wars was largely satisfied during the 1950's.
2. The economy is showing signs of being overbuilt both in housing and in industrial capacity.
3. We are facing increased foreign competition both at home and abroad, and we are being undersold.
4. The consumer is showing signs of being over-extended; is less

exuberant in his buying habits and in his inclinations to assume more debt.

5. There are no signs of major technological break-throughs in the consumer area such as a television industry or a synthetic fiber industry.
6. Our economy is much less liquid now than it was in 1950.
7. The substantial increase in family formations expected in the 'Sixties will be beneficial to the economy but not as dynamic as many believe.
8. Automation will receive its greatest impetus in the 'Sixties because of high and increasing labor costs. This, while beneficial in the long run, will tend to reduce employment in the manufacturing segment of the economy.

The 'Sixties are more likely to be a period of healthy consolidation rather than one of pronounced growth. Many unsound practices have crept into business in the lush period of the 'Fifties. Unnecessary costs are pricing us out of both domestic and foreign markets and loose credit practices cannot continue to offset these problems.

In the political field in particular, stability has become an ugly term, synonymous with maturity or decadence. This may not be true by the time the 1960 decade has made history. Perhaps from politician to stockbroker, we are overly committed, for the time being, to the inevitability of economic growth.

# COMMUNIST CHINA: TAKE-OFF TO SUSTAINED ECONOMIC GROWTH?

Yuan-li Wu\*

## Introduction

A limited objective of this paper is to introduce to the non-specialist certain facts and general observations about the economic development of mainland China during the last decade. We are probably not far wrong in assuming that most of the present-day "China specialists" would agree with us on the general statements we shall make. But the central purpose of the paper is to pose the question whether Communist China has already succeeded in taking off to a process of sustained economic growth. This is a far more difficult task and the answers will remain debatable for some time inasmuch as the implied prognostication must necessarily involve a certain degree of uncertainty. But differences in opinion in this respect are primarily the result of different evaluations of official Communist statements and statistics. The substantial issues can at any rate be made fairly clear.

In order to appreciate the crucial importance of the question we have just posed, a definition of terms would be in order. Economic growth in the present context is measured in terms of the expansion of per capita national product. It is said to be sustained if the expansion of per capita national product is self-generating so that its continuation at a relatively constant or even increasing rate can be expected without any drastic modification of the existing conditions under which the growth of per capita national product is currently taking place. The continued growth of per capita national product without any additional external stimuli such as an increase in foreign aid or a sharp stepping-up of controls of consumption is a case in point. An alternative and more stringent definition of sustained economic growth would be the continued expansion of per capita national product not only without any additional external stimuli, but with the concomitant gradual relaxation of domestic controls. The last condition is by far more demanding inasmuch as the ultimate test of sustained growth must be the diminution of tight controls if for no other reason than that it may not be possible to maintain such controls indefinitely.

Without going into the theory of economic development, suffice it to say that an increase in per capita national product does not take

-----  
\* Director, Institute for Asian Studies and Professor of Economics, Marquette University (on leave); Visiting Professor of International Business, University of San Francisco, California, 1960 to 1961; author of An Economic Survey of Communist China, Bookman Associates, New York, N. Y., 1956, and Economic Warfare, Prentice-Hall 1952, etc.

place of its own accord. It usually is the result of a combination of several determining factors in aggregate economic growth -- the quality of the working population, the state of technological progress and managerial skill, the spirit of enterprise possessed by the decision-makers, the amount of natural resources available, and the rate at which the capital stock is being expanded through net investment. It is also affected by the rate of population growth, the manner in which the total product is divided among different population groups, and the rates of increase in per capita consumption by these groups. If, for instance, population growth is at 2.5 per cent per annum, and if for every dollar's increase in the Gross National Product three times the value in gross investment is required, the other factors in economic growth being given, then gross investment must constitute 7.5 per cent of the Gross National Product in order to maintain the per capita value of the latter at the same level. A simultaneous increase in per capita Gross National Product of, say, 3 per cent would necessitate a gross investment-income ratio of about 17 per cent. Since sustained economic growth requires a constant or increasing rate of expansion in per capita Gross National Product, and since this rate of increase must be large enough to absorb unavoidable adverse developments that might reduce production, a still higher proportion of the Gross National Product must be invested in order to make certain a 3 per cent increase in per capita Gross National Product unless changes in the "other factors" could compensate for any deficiency in investment. Since investment requires abstention from consumption, if per capita consumption were to be increased immediately, it would not be possible to raise the rate of investment to the required level unless its initial Gross National Product could be expanded somehow. The problem of "take-off" to sustained economic growth is therefore often viewed as one of achieving a sufficiently high level of investment for a period of time that is long enough to assure further growth, though possibly at a lower rate than that obtained in the take-off period.

An assumption that is fairly widely held by economists and others in the West with respect to the under-developed countries of Asia and elsewhere is that, at the present time, the predominant desires of these people, or more precisely of the intelligentsia among them, are greater national prestige and a higher level of material well-being. Furthermore, it is probably true that in the minds of most of these intellectuals, improvement in the standard of living is identified both with increase in the national product and with industrialization, although such an identification, if unqualified, may be quite mistaken. Political prestige on the international scene is also regarded -- this time with perhaps more justification -- as a result of economic prowess. Consequently, any under-developed nation that has succeeded in accomplishing both objectives without substantial material aid from foreign countries, or in doing so with foreign aid but within a relatively short span of time, would be held in awe and as a model to be emulated by the rest. If Communist China happens to furnish us with such an example of sustained economic growth, it is not improbable that other nations may try to follow the Chinese lead, and the political implications of such a development would be unpalatable to the West. Moreover, if Communist China has actually staged the "take-off" and is now "climbing" rapidly, it would behoove the West to keep a weather eye on the storm warnings which the developing economic potential of the Communist regime will inevitably portend.

### The Communist Economic Record

Concern about Communist China's economic development has arisen mainly because of the apparently rapid rate of growth achieved by the country during the last two years although the rate during the First Five Year Plan (1953-1957) was quite impressive. An examination of the record would demonstrate this point.

Various authors have shown that the years 1949-1952 saw the rapid recovery of China's industrial production to at least the prewar level. The production of food grains in 1952 also surpassed the recorded prewar peak although the latter was probably grossly underestimated. Without attempting to be very precise, we can nevertheless assert that the year 1952 could be judiciously used as a starting point to measure subsequent development. On this basis we shall cite three categories of indices measuring respectively estimated changes in the national income or product, changes in gross industrial and agricultural production, and changes in the output of selected commodities. We shall also compare the rate of expansion during 1953-1957, the period of the First Five Year Plan, with that of 1958-1959 which has thus far been characterized, in official Communist parlance, as the era of the "great leap forward."

First, according to official Communist estimates and definitions, mainland China's national income increased by 53 per cent during the First Five Year Plan (1952 = 100), the annual rate of increase varying from 14 per cent in 1953 and 1956 to between 4.6 and 6.5 per cent in the remaining three years. Since population growth is estimated at slightly over 2 per cent per annum, there was an increase in per capita national income in every one of the five years. However, it is further claimed by the same sources that the annual rate of increase in national income rose to 34 per cent in 1958 and again to 21.6 per cent in 1959.<sup>1</sup> On the basis of the vast acceleration in the rate of growth claimed for these two years, one might maintain that sustained economic growth has been accomplished.

For those who question the meaningfulness of Communist national income data, reference may be made to an American estimate of Communist China's gross national product. According to this estimate, the annual rate of increase in Gross National Product in 1953-1957 averaged 7 per cent in 1957 prices.<sup>2</sup> This rate was, however, topped by an estimated 20 per cent increase in Gross National Product in 1958 over and above that of 1957 and by another 10 per cent increase in 1959 compared with that of 1958. These figures also point quite unmistakably to the phenomenon of acceleration and hence to the possibility of sustained growth.

This broad picture can be seen in sharper relief if we consider the trends exhibited by several individual sectors of the economy. Again, according to official statistics, the annual rate of growth of gross indus-

1. See Economic and Cultural Statistics on Communist China, Peking, September, 1959, compiled by the Communist State Statistical Bureau.

2. Cf. William Hollister's paper below.



trial output during 1953-1957 averaged 18 per cent. More specifically, the rates were 24.5 per cent for heavy industry and 12.8 per cent for light industry. In contrast, agricultural production grew at only 4.5 per cent a year during the same period. In all cases, however, the rate of growth was reported to be dramatically higher in 1958 and 1959 on a link index basis, the degree of acceleration being more pronounced in the case of agriculture which had distinctly been a laggard until then. Specifically, the rates were 66 per cent in 1958 and 39.3 per cent in 1959 for all industry and 25 per cent in 1958 and 16.7 per cent in 1959 for agriculture. The corresponding rates for heavy industry were 103 per cent in 1958 and 43.3 per cent in 1959; they were 34 per cent throughout for light industry.

On the basis of these figures, it would appear that the Communist Chinese economy did not develop evenly. The obvious emphasis was on industry as against agriculture and on heavy industry in contradistinction to light industry. This lopsidedness was more pronounced during the First Five Year Plan than in 1958 and 1959, but the last two years also saw a spectacular increase in industrial production, especially heavy industry, even though the imbalance between agriculture and industry was somewhat redressed. This pattern of emphasis stands in sharp contrast to the pre-Communist pattern and closely resembles the Soviet Union's experience. It may also be pointed out that if the changes in the Gross National Product previously cited are at all indicative of the real changes, it would seem that economic growth did not have to be balanced. In fact, one might even contend, as the Communists have done themselves, that but for the deliberate all-out drive in a few sectors of the economy the rate of growth might never have been stepped up to the extent that it was in 1958 and 1959. The only question is whether sustained economic growth has been or can be generated on such a basis.

The effect of the all-out drive in 1958 and 1959 on a few selected commodities can be seen in the following published official data:

	Average annual rate of growth 1953-1957	Rate of growth in 1958 com- pared with 1957 (In Percentages)	Rate of growth in 1959 com- pared with 1958
Total Production of			
Crude Steel	31.7	49*	67
Pig Iron	25.2	60*	115
Coal	14.4	108	29
Electric Power	21.6	42	51
Metal-cutting Lathes	15.3	79	40
Food Grains	3.7	35	8
Cotton	4.7	28	15

\* If production by small units employing native methods were included, the percentage rates in 1958 would be 107 for steel and 130 for pig iron or more than doubling those shown in the table.

SOURCES: Economic and Cultural Statistics on Communist China, September, 1959. "Communique on China's 1959 Economic Progress," NCNA, January 21, 1960. The 1958 and 1959 figures are rounded, the latter representing preliminary reports.



The unmistakable acceleration in 1958, the tapering off in 1959, and the higher plateau reached in the latter year in comparison with 1953-1957 are well in line with the general picture depicted thus far.

### Reliability of Chinese Statistics

Skeptics will unquestionably point out that one cannot accept the Communist claims at their face value. This is true for several reasons. In the first place, official statistics are misleading in a general way because, without being completely false, they are frequently used to insinuate that conditions are better than they really are. This is accomplished by incomplete presentation, imprecise definitions of terms or their omission, double-counting, and general disregard of statistical rigor. Second, a rapid rate of advance in various indices often emerges through comparison with periods of particularly poor performance or simply as a result of more comprehensive coverage in statistical reporting in more recent years in comparison with that of earlier years. The latter phenomenon is not unusual in the initial development of statistical service anywhere. Third, the accuracy of statistical reporting during 1958 is particularly suspect because of a deliberate Communist policy at the time to use glowing statistics for the purpose of spurring the population on to more strenuous exertions. The downgrading of 1958 agricultural output in 1959 is a typical example of the more spectacular admissions of error. Failure to mention the possible deterioration of quality in many products in 1958 is another excellent example. Where aggregate data are concerned, the method of valuation used presents another serious question mark.

However, as most students of Chinese economic development will agree, even if allowance is made for all detectable errors, misrepresentations and inconsistencies, the rate of growth of the Gross National Product in 1953-1957 and again in 1959 would still be impressive while the acceleration in 1958 appeared to be a major shift of the trend line. This observation would seem to be especially warranted in the case of individual commodities of pivotal importance. The real issue, therefore, is not whether Communist China's rate of growth is high, but whether it is on a sustainable basis. In order to analyze this problem, let us first digress for a moment on economic conditions in pre-Communist China and then examine the pattern of development pursued by the Communists.

### Economic Conditions in Pre-Communist China

First of all, it should be borne in mind that pre-Communist China was a predominantly agricultural country and that, in spite of its size, it did not have sufficient arable land to go around. The Chinese population had probably grown rather rapidly in the last few centuries, and although early statistics both of the population and of arable land were unreliable -- they were both grossly underestimated -- the combination of large population and land shortage led inevitably to the predominance of very small farms. Cultivation was extremely labor-intensive and skilled, but the output per man was very low. The land tenure system was such that the burden of rent was inordinately high for some tenant farmers, while the absence of rural credit institutions gave full rein to usury loans that siphoned off the savings of the relatively wealthy into consumption,

loans that did not increase output. The impeded flow of rural savings into urban industry could not but retard industrial development, which in turn failed to provide the much needed alternative employment opportunities for the under-employed on the land.

Modern manufacturing, mining and transportation facilities did not fail to appear completely. However, with sporadic exceptions, the initial impetus both in financing and in entrepreneurship was supplied by external sources. Virtually all the larger enterprises, including public utilities, were foreign operated and owned. They were intimately related to foreign trade and located in foreign concessions and settlements. The railway lines built with the aid of an assortment of foreign loans were meant to serve the markets for the new enterprises and for external trade and were located in the special spheres of influence staked out by the various western countries providing the financing. The combination of these circumstances had a profound effect on the location of modern industry which became concentrated in the coastal strip, the major river ports of the Yangtse and Manchuria. The late-comer Chinese enterprises also congregated in the same areas as the foreign enterprises by virtue of the operation of external economies and the political security offered by the foreign concessions.

Modern Chinese industry had several other characteristics not uncommon for under-developed economies. Its output consisted primarily of consumer goods so that the only large enterprises were producers of such goods as cotton textiles, flour, matches, tennis shoes, and the like. In the country as a whole, coal mining was probably the sole important example of modern enterprise in the extractive industry and most capital equipment had to be imported. It was not until the middle-thirties that new state enterprises began to be established in the production of capital goods such as electrical equipment and supplies, metallurgical products, and so forth. It was also during this period, and especially after 1941, that Japan, with Manchuria under its firm control, and compelled by the exigencies of the war, began to establish a major base of heavy industry in China's northeastern provinces. If we disregard Manchuria, the capital goods industry of pre-Communist China was altogether unimportant and it was dominated by state enterprise. In the circumstances it was only to be expected that the general level of technological competence in private enterprise was too low for complex operations. The same state of retarded development existed in the field of management in most enterprises even though Chinese entrepreneurship was already beginning to explore new horizons on the eve of the war with Japan.

Two developments of overwhelming importance were superimposed upon the economic scene sketched above and played a vital role in making possible the Communist rise to power. These were the wartime and postwar hyper-inflation which undermined the Nationalists' ability to govern and the devastation of Manchurian industry under Soviet occupation at the end of World War II. The inflation owed its origin in part to the locational factor mentioned earlier which caused the Chinese government to lose its main geographical base of revenue as soon as the coastal areas were occupied by the Japanese. In part it was the result of China's failure to develop sources of direct taxation and to establish a sound market for government securities. Poor fiscal and monetary management and slack-

ness in administrative control, particularly where the armed forces were concerned, contributed their share. The expanded expenditures both for war and for developmental purposes in areas under the Nationalists' control helped to swell the ever increasing flow of money competing for the country's resources. The result was inevitable. The violent inflation destroyed the Chinese middle class and with it the only element of stability and enterprise that might have brought about orderly growth.

The devastation of Manchuria, on the other hand, had several related effects. In the first place, it effectively eliminated Manchurian industry as a source of supply for the rehabilitation of China, thus making postwar recovery more difficult and more dependent upon the good will of foreign powers -- first the United States, then the Soviet Union. Second, by playing upon the desire of the Nationalists to regain control over the area, which would have to be accomplished if Manchurian resources were to be employed in reconstruction, the Nationalist government was trapped in a war of attrition which fanned the inflation and slowly wasted away the government's resources in a series of futile campaigns.

On the basis of this sketchy account, it would appear that the Communist regime inherited two immediate problems -- the complete collapse of the monetary system and a very low level of production. On the other hand, it is also quite clear that these problems were directly and indirectly the results of the long war with Japan and that they might, therefore, prove to be short-run problems. Once the ravages of war and revolution have been repaired, might it not be reasonable to assume that sustained economic growth would then be possible?

#### Economic Development in 1949-1957

We shall not dwell at length on the economic policies of the Chinese Communists between 1949 and 1957, that is, both during the period of rehabilitation and stabilization and during the First Five Year Plan. The following sketch will suffice.

As mentioned earlier, general recovery in industrial and agricultural production was accomplished around 1952-1953 although the rehabilitation of Manchuria actually took much longer. Cessation of hostilities on the mainland was a principal factor in promoting recovery. The galloping inflation was first halted in 1950 and its outward phenomena thoroughly repressed around 1952. The policy of relative moderation toward private industrialists and other businessmen who were willing to cooperate with the regime met with great success. In the rural areas, the Communists were also careful in artfully concealing their real intentions by first promoting a land redistribution program so that only a minority of the rural population was the target of attack at the time.

Having more or less consolidated their control over the rural areas and having established over-all supervision in the urban sectors, the Communists then proceeded, following the armistice in Korea, to construct a planned economic system along the distinctive lines of the Soviet model. The emphasis on industrial rather than agricultural development, particularly heavy industry, was clearly reflected in the statistics referred to earlier. Consumption was regulated through an expanded rationing system,

reinforced by planned purchases of farm products, direct allocations, and nationalization and collectivization of the distributive channels. With the expansion of government credit institutions, forced savings became a general practice. Large-scale nationalization, especially during 1956, served to channel private profits into state savings. At the same time, collectivization of agriculture through the formation of cooperative and, to a lesser extent, state farms facilitated the "collection" process while similar consolidations and the establishment of large production complexes, generally with Soviet assistance, also took place in the industrial sector. There was a distinct shift in the geographical location of industrial centers from the coastal areas to North, Northwest, and Central China, accompanied by related developments in rail transportation. A higher degree of self-sufficiency was accomplished in the supply of goods required for subsistence and a number of new industrial products were introduced into China. Finally, an unending series of labor-emulation contests and economy and rationalization drives were instituted to bring about popular consciousness of the need for hard work, innovation, and efficiency.

The above remarks may sound somewhat laconic inasmuch as they do not convey the human drama that took place as a result of some of the measures the economic aspect of which alone we have singled out. This is not to deny the existence of suffering and pain that must have accompanied the turmoil and readjustments some of the Communist policies entailed. For one thing, it may be recalled at this point that studies of China's national income in the thirties showed a very low level of domestic capital formation. Although productive capacity had vastly increased by 1952, to achieve the estimated 7 per cent annual increase in the Gross National Product between 1953 and 1957 by investing some 17 per cent of the Gross National Product each year and through the full utilization of existing industrial capacity, if true, would be a most remarkable feat. Nor would this have been possible without the most rigorous controls and painful privations. To this we might add that, on the basis of information now available, there is not sufficient reason to believe that such an average rate of growth was not actually approximated.

### Factors Underlying the Great Leap

In this connection one important point should be made; namely, while Communist China's First Five Year Plan was quite successful in terms of the fulfillment of planned goals, it was not successful enough. First, the average growth rate of the Gross National Product, although impressive in the aggregate, was smaller on a per capita basis, and was not sufficiently large to guarantee sustained growth in the face of possible adverse developments beyond the country's control, such as unfavorable weather. The Communist authorities may have been aware of this situation, or they may have simply felt the desirability of a higher rate of growth. Second, the rate of growth was uneven from year to year. When the rate was high, as in 1956, it was accompanied by serious shortages. Third, the expansion of agricultural output and of consumer goods industries had lagged behind. These should be expanded more rapidly. But there were also other bottlenecks, such as farm equipment, chemical fertilizers, alloy steels, machinery, and so forth. Fourth, the privation which alone made possible the rate of growth thus far attained was creating dissatisfaction among the intellectuals as well as a popular clamor for

more consumer goods. While investment was considered too high by some, others were raising the Malthusian spector of an exploding population. Moreover, the rate of non-agricultural investment was insufficient to absorb the surplus agricultural population, as well as the new entrants to the working force, into gainful employment. A new departure must therefore be made in order to effect a real "take-off."

From the point of view of the Communist planners, the new plan should preferably satisfy a number of conditions. It should provide for an increase in the Gross National Product within a short time so that both per capita consumption and per capita investment could be increased simultaneously if need be. It should consist of arrangements under which consumption could be controlled more rigorously, if necessary. The accelerated increase in Gross National Product should be possible without prior investment on a large scale. This implies the adoption of less capital-intensive methods of production, the employment of the under-employed as well as the more intensive exploitation of those already employed, and the further large-scale propagation of the spirit of technological innovation.

#### The Communes and the Small Industry Movement

It was under these circumstances that the Communists introduced during 1958 the communes and spearheaded the movement to establish numerous small enterprises for the production of industrial products. The communes were formed through the amalgamation of cooperative farms. Within the communes, mess halls were set up and many of the individual family's normal responsibilities were taken over by the collective organization. The entire population thus became a homogeneous and mobile labor force. Occupation lines were cut across. While specialization was not completely disregarded, farmers now worked also as industrial workers just as urban workers had hitherto been required to work on the farms from time to time. Forced labor became universal practice while the piece-wage rate was temporarily abolished in favor of food and clothing rations plus a nominal money wage each month. Both within the Commune and in urban areas a host of small enterprises employing native methods of production began to hum with activity. They were told to concentrate on the production of a few commodities -- in particular, pig iron, steel, ball bearings, farm implements and coke, although consumer goods were not excluded. The selection of a few commodities only was designed to make the mass movement more sharply focussed.

Such, then, was the underlying economic reasoning of the commune and of the ubiquity of small iron and steel smelting plants which dotted the countryside. Statistically, the result was already indicated in the first part of this paper. The Gross National Product rose sharply in 1958 and probably continued to rise at an estimated annual rate of 10 per cent in 1959. Investment increased to 29 per cent of the Gross National Product in 1958 and an even greater percentage has been estimated for 1959. Per capita consumption is believed to have increased but little, however. Now the question is whether these advances should be discounted further in order to arrive at their true value and whether such a pattern of development can be expected to endure.



### A Tentative Appraisal

As far as the first point is concerned, there are some good reasons to assume that the real advance of the Gross National Product in 1958 might be less than the 20 per cent cited here, which was already much below the official claim of 34 per cent increase in national income. From all reports it would appear that the consumption of both goods and services by farm households actually declined during the year of the "great leap" as a result of communization. The shortage of vegetables, meat, eggs, and other home made consumer items and the substitution of so-called communal service for what the family used to do for itself would seem to justify such an assumption. Further, there is a question of proper valuation for goods of poor quality that may have been priced at the same level as standard units and for goods which were produced but were not in demand and which would have commanded lower prices if free markets had existed. We refer to some of the products that were produced by the small plants employing native methods, such as the "native" pig iron and steel, much of which turned out to be sub-standard and useless in 1958, and to the large sweet potato crop which was not a principal constituent of the Chinese diet in general. A different pricing system would have resulted in a smaller increase in the Gross National Product.

As for the possibility of maintaining a high rate of growth through the employment of labor-intensive methods, it is well to bear in mind that there may be technical limitations. The much vaunted practice of deep-plowing in 1958 has since been described to be in error when it was carried out in excess and without regard to the availability of fertilizers.<sup>3</sup> The same is said to be true in the case of close-planting in producing food crops. It is also true that some native methods in producing pig iron and steel have already been completely discredited.

But perhaps by far the most important question is how high the rate of investment can be kept in relation to the Gross National Product. Official reports claim that the supply of consumer goods in 1959 was better than in 1958, but a very serious shortage still existed in the case of such basic items as meat, eggs, marine products, sugar, shoes, light bulbs, cotton for padding clothes, and so forth. Perhaps it is not sufficiently realized by the Communist authorities that the clamor for consumer goods is not merely an expression of impatience for a slightly higher standard of living. Rather, the intensity of work since 1958 may have increased the people's appetite for such bare necessities as a result of physiological need, and the Communists have not made adequate allowance for this development. The danger of too much investment and too little consumption must be faced. The cost of malnutrition and over-work cannot be overlooked indefinitely. The question of adequate incentives must be solved, as indeed it is being done through the reintroduction of work standards and quotas, merit payments, and the production-responsibility system in communal enterprises.

Available evidence does not yet permit us to draw a definite conclusion regarding the probable rate of growth of the Communist Chinese

-----  
3. See People's Daily, Peking, September 5, 1959.



TABLE 1  
Communist China's Gross National Product by End Use  
1957 - 1960

Final Sales	Billion yuan in current prices			
	1957	1958	1959 (preliminary)	1960 (projected)
Consumption				
Consumer Goods				
Retail Sales	40.6	44.5	51.1	55.4
Farm Home Consumption	30.3	32.9	29.0	30.5
House Rent and Consumer Services - Nonagricultural	5.8	6.2	6.9	7.6
Agricultural	3.0	3.3	3.3	3.4
<u>Total Consumption</u>	<u>79.7</u>	<u>86.9</u>	<u>90.3</u>	<u>96.9</u>
Gross Domestic Investment				
Agricultural Investment				
Purchases from Agricultural Sector	1.1	2.3	2.3	2.3
Purchases from Non-agricultural Sector	1.4	2.9	3.5	4.7
Non-agricultural Investment				
Investment in Capital Construction				
Budget Expenditures	14.5	24.1	28.7	35.6
Non-budgeted	1.2	5.3	5.0	6.0
Increase in Inventories	5.3	5.4	8.3	5.4
<u>Total Investment</u>	<u>23.5</u>	<u>40.0</u>	<u>47.8</u>	<u>54.0</u>
Government Purchases of Goods and Services				
Defense	5.5	5.0	5.8	5.8
Social, Cultural, Educational, and Health	2.6	2.7	4.0	6.2
Administration	2.2	2.2	2.8	3.0
Other	.5	.7	.8	.9
<u>Total Government Purchases</u>	<u>10.8</u>	<u>10.6</u>	<u>13.4</u>	<u>15.9</u>
Net Foreign Investment				
Sales (Exports and other)	5.7	6.8	----	----
Purchases (Imports)	-4.8	-6.2	----	----
<u>Total Net Foreign Inv.</u>	<u>0.9</u>	<u>0.6</u>	<u>0.7</u>	<u>0.8</u>
<u>Total Gross National Product</u>	<u>114.9</u>	<u>138.1</u>	<u>152.2</u>	<u>167.6</u>

economy in the next few years. However, at the present rate, a sufficiently large margin appears to exist so that even if there must be a little less investment and a little more consumption, the per capita Gross National Product might nevertheless continue to expand at a fairly constant, if not increasing rate. Both the material resources required and the organization to put them into use are present.<sup>4</sup> Tentatively, it would appear then that Communist China may have successfully staged a "take-off" to sustained economic growth. A more definite statement will have to wait for another few years.

Having reached such a tentative conclusion, let us raise a final question or two for further thought. First, since China might have reached the "take-off" stage long before this time if there had not been the war with Japan, the success of the Communists should not be interpreted as proof of the non-existence of alternative approaches to sustained economic growth. On the other hand, both economists and statesmen must face the still unanswered challenge of finding at least equally effective means to propagate the spirit of enterprise and innovation, to provide the relentless drive and hard work, and to inculcate the virtue of thrift and austerity required by an under-developed country striving for economic development within a reasonably short time and without the brutality of a totalitarian society. Finally, let us bear in mind the sobering thought that the Communist Chinese model of economic development has been predicated upon drastic domestic controls. It should not, therefore, be emulated by another country unless the latter is able to exercise these controls and is also quite prepared to accept their consequences. It is entirely possible that the cost of rapid economic growth can be too high.

-----  
4. For an up-to-date appraisal of mainland China's mineral resources see K. P. Wang, "Rich Mineral Resources Spur Communist China's Bid for Industrial Power," Mineral Trade Notes, Special Supplement No. 9, U. S. Department of the Interior, Bureau of Mines, March 1960.

## **TWO CASES OF INDUSTRIAL LAND DEVELOPMENT FROM THE POINT OF VIEW OF A PARTICIPATING FIRM**

Kenneth W. Meyers\*

### Introduction

The Nation's financial and business press is today liberally sprinkled by advertisements of organizations which seek to encourage manufacturing plants to "pick up and move," or which strive to influence a company's choice of a site for an entirely new operation. States, municipalities, railroads, and "non-profit" organizations are among the parties active in such proselytization. But this is only the surface evidence of the continuing struggle among communities for manufacturing payrolls. Every Chamber of Commerce is active, as are all varieties and hues of builders and land speculators. The enticements are varied, also -- outright grants of money and land, special tax arrangements, provision of utilities under attractive arrangements, and even factory buildings constructed by the community and leased to the manufacturer for a modest rental. Nor is this unabashed wooing of the manufacturer limited to the United States. The tremendous investments which U.S. manufacturers are making in the areas within the new European economic groupings have stimulated a competitive struggle similar to that long characteristic of the United States.

The reasons for such interest are not difficult to ascertain. Manufacturing plants generate income for a community or a region in many ways -- payroll, taxes, transportation and power requirements, purchases of materials and supplies, plant construction, and so forth. In terms of a region's pattern of capital formation, a manufacturing establishment exerts an influence which is far beyond the amount of its net worth, or its total assets, or even its annual sales. Furthermore, the successful manufacturing firm makes this type of contribution year after year in an ever-increasing volume.

For the student of economic or business history, then, the factors that influence the location of manufacturing establishments are of considerable importance because this particular mode of business enterprise has such significance for the rate of capital formation of geographic regions.

The two cases which follow suggest that the entrepreneurs and organizations have long been aware of the significance of the manufacturing firm as an income generator for a community, and that their activities in bringing manufacturing establishments to particular areas have exerted a considerable, but as yet unmeasured, impact upon the growth patterns of various regions.

-----  
\* Dr. Meyers is Professor of Industrial Management, Department of Production Management, School of Commerce, Northwestern University. This address was delivered at the Business History Conference held at Marquette University on February 27, 1960.

## The First Case -- Bucyrus Moves to South Milwaukee, Wisconsin

### Manufacturing at Bucyrus, Ohio

In the fall of 1891 the Bucyrus Steam Shovel and Dredge Company, founded in 1880, was operating its facilities at Bucyrus, Ohio, at capacity -- about \$240,000 a year. This volume of sales was derived almost entirely from the manufacture of heavy excavating machinery -- steam shovels, large dredges, and gold mining equipment. The Company's production facilities were located on a triangular plot, one and one-half acres in area, which was bounded by main-line railroads on two sides and by a city street on the third side, and which was surrounded by developed property. The buildings were of mixed brick and frame construction, mainly two stories in height, and, prior to 1880, had been used for the manufacture of agricultural implements.

Since the Company's founding in 1880, several trends had combined to render these facilities unsatisfactory. The first was the gradual increase in the physical size and weight of the product line -- from railroad type steam shovels weighing about 20 tons to ones grossing over 50 tons, and from small one-cubic yard dipper dredges to machines having a capacity of about seven cubic yards. Second was a four-fold increase in sales volume -- from about \$60,000 to \$240,000 annually. Finally, methods of manufacturing were changing. In 1880, all primary power was supplied by steam engines which, in turn, drove line-shafting which was connected to power tools through belts. By 1891, the new manufacturing plants were installing electric power generating equipment and electric motors, thus providing greatly improved flexibility, lower operating and maintenance costs, and electric lighting.

Thus it was that in the summer of 1891, the Company's chief engineer, A. W. Robinson, estimated that an immediate expenditure of about \$15,000 was necessary for a new steam plant, a central heating and lighting system, and new line shafting. These improvements would add little to productive capacity, since this would require additional foundry machining, and erecting facilities, as well as storage space for raw materials, castings, and finished products. Moreover, the floor plan at the Bucyrus plant was rambling and inefficient, the ceiling heights were inadequate for the erection of the larger machinery, and the overhead crane capacities were not suited to the increased weights and size of the product. Finally, the one and one-half acre site did not permit expansion of the type required, and there was no prospect of acquiring additional land adjacent to the existing property.

### The South Milwaukee Company

At the same time that the officers of the Bucyrus Steam Shovel and Dredge Company were wrestling with the need for plant rehabilitation and expansion, several individuals living in and about Milwaukee, Wisconsin, began to acquire options on some 800 acres of farm land in the Township of Oak Creek, County of Milwaukee -- an area about ten miles south of the center of the City of Milwaukee, and bordering the shore of Lake Michigan. By mid-1891, a stock company had been formed, the South Milwaukee Company, with George B. Van Norman as president, E. H. Bottum as vice president, Fred W. Rogers as secretary and John S.

George as treasurer. According to a prospectus, "The stockholders of the company embraced leading capitalists in Milwaukee and a number in Chicago, among them men prominent in the management of the Chicago and North Western Railroad."<sup>1</sup>

The capitalization of the South Milwaukee Company is not known, but there must have been some assurance of financial backing because in October, 1891, while the present site of South Milwaukee was still dotted with stacked shocks of corn stalks, the officers of the Bucyrus Erie Steam Shovel and Dredge Company signed an agreement to shift its manufacturing operation to "South Milwaukee" and to guarantee to employ 175 men.<sup>2</sup> The arrangements were made by Rogers and George for the South Milwaukee Company, and by W. H. Harris, president of the Bucyrus firm and stipulated that, as consideration for the move, the Bucyrus Company would receive 15 acres of land and \$50,000 toward the preparation of a manufacturing site and the construction of factory buildings.<sup>3</sup>

The tract of land thus granted to the Company was to consist of three parcels; eight acres in the northeast sector of the center of the proposed town, bounded on the west by the tracks of the main line of the Chicago and North Western Railroad and on the south by a street one block removed from the main east-west street of the town; five acres of "prime" residential property; and two acres located on the south side of Oak Creek where that stream enters Lake Michigan. The first parcel of land was to be devoted to the Company's manufacturing operations, the second could be sold by the Company at will, and the water front land was intended for dredge construction. The South Milwaukee Company guaranteed that a belt railroad would be constructed from the Chicago and North Western tracks to the waterfront site, and that the Bucyrus Company would enjoy perpetual rights of free use of this line for the transportation of men and materials between the Company's main manufacturing site and the lake front site.

Similar arrangements between the promoters and at least ten other companies followed and, by the end of 1892, a horseshoe factory, a furniture manufacturer, and a malleable iron works were among the other prospective employers of the new town.<sup>4</sup> The proposed street plan had been marked out in the midst of the corn fields by this time, and some dwellings were being constructed by the speculators. The factory buildings of the Bucyrus Company were also begun in the fall of 1892 and were completed during the winter of 1892-1893, during which time the sum of \$50,000 was made available to the Company by the speculators, as agreed. As of January 1, 1893, the events just described were summarized as follows on the accounting records of the Bucyrus Company:

"Book value of land donated by South Milwaukee Company	\$ 45,000
Cash contributions made by South Milwaukee Company to January 1, 1893	48,000
Book value of machinery and equipment transferred from Bucyrus, Ohio	37,000
Capital outlay by Bucyrus Steam Shovel and Dredge Company	<u>4,000</u>
TOTAL	\$134,700"

The Company had no intention of merely duplicating the capacity of its former plant, however. In addition to the machinery and equipment transferred from Ohio, some \$82,000 was expended over the next few months for new machinery and equipment, including an electric generating plant. The result, as described in the Engineering and Mining Journal of November 11, 1893 (p. 500), was a manufacturing facility of perhaps twice the capacity of the plant at Bucyrus, Ohio, and which afforded ample room for yet further expansion.

In March, 1893, a reporter from the Bucyrus Evening Telegram ventured to South Milwaukee to see whether it was really true that the town's principal employer was leaving. His dispatch to Bucyrus, Ohio, read:

It's a go, the Steam Shovel and Dredge Company is on the move "sure enough" this time.

Then, after describing the Company's new plant, he stated:

South Milwaukee is enjoying a big boom. Already factories and machine shops have been constructed which at a conservative estimate will employ nearly 1,000 men. There are in town 600 houses and 30 stores, and there were two hotels, one of which lately burned. Also there are eight large boarding houses.<sup>5</sup>

Meanwhile, the South Milwaukee Company was beginning to reap a bountiful harvest. Special excursion trains brought prospective buyers into town each weekend, and lots were sold at a rapid pace -- \$87,000 on one weekend and \$120,000 on another.<sup>6</sup> Nothing seemed to deter the buyers, many of whom were purchasing for speculation rather than for use. Even the newly founded village newspaper, the South Milwaukee Journal, was caught up in the spirit of the times:

MARCH 25, 1893 - p. 1.

Another iron working concern to be located here. More buildings ought to be erected at once to meet the demand. Every day the inquiry is made, "where can I get a house, or a few rooms?" We have just such inquiries made at this office nearly every day in the week. The next best thing to locating and building factories is for some of our wealthy citizens (and we have a number of them) to rush up a few dozen houses in order to keep up the influx of population and induce others to come here and become permanent citizens.

APRIL 8, 1893 - p. 3.

Local news. The Bucyrus Company received their first steam shovel Friday to be placed upon their own car to be built here. ... The Bucyrus works are getting water from Moore's dam on Oak Creek. They have laid pipes to connect with their boilers. The water is conveyed through the pipes by means of a rotary force pump.

And the same journal reported that the business of the town's newly acquired factories was booming:



MAY 13, 1893 - p. 4.

The Schutz Bros. Furniture Factory, the Bucyrus Steam Shovel and Dredge Co., and Malleable Iron Works, and the Horseshoe Factory have all been running day and night shifts for the past week. These factories find it an impossibility to keep up with their orders with an ordinary day's work. The Bucyrus Works are rushing business day and night, also, completing their steam shovels, putting in machinery and getting everything in complete readiness for the force of men who will be here next week.

Then came the panic of 1893 and the same journal editorialized:

JUNE 17, 1893 - p. 4.

The breaking of banks all over the country does not indicate any particular lack of prosperity, but shows that the speculative fever has grown to alarming proportions in this country. Nearly every failure can be traced directly to unwise and unfortunate speculation. The desire to get rich easily is becoming more prevalent in the U.S. and a number of people who imagine themselves smart enough to make money without work is increasing wonderfully. The sooner people generally accept the fact that they can not get anything valuable for nothing, the better off the world will be. (Editorial)

The next few years were difficult ones for both the Company and the community. Aside from unemployment, the worst enemy of the town seemed to be fire. On several occasions a number of adjacent houses burned down together because of the absence of a water supply with which to fight the fire. More than one factory also went up in smoke, including the town's second largest employer, the Malleable Iron Works. The Bucyrus Company survived the fire hazard, but not the financial perils of the period, going into receivership on January 28, 1895.

With the upturn in business in 1896-1897 both Company and community revived, and by 1901 the South Milwaukee Journal reported a population of 4,000 and such improvements as "electric lights, water works, good streets, ample sewers, electric and steam railways, an express company, telephone, fire department, twenty factories, and good schools." Also reported upon was the need for more "live industries." As for the Company, sales increased to nearly \$1,000,000 annually, with a payroll of some \$250,000 and 500 men -- nearly the total of all the other South Milwaukee manufacturers combined.

Small wonder, then, that Fred Rogers, secretary of the South Milwaukee Company and subsequently president of the South Milwaukee Bank, was wont to boast in later years that the best investment ever made for South Milwaukee was the \$50,000 which he and John George had offered the Bucyrus Steam Shovel and Dredge Company to come and build a factory in the cornfields adjacent to Oak Creek.<sup>8</sup>

In retrospect, one wonders what the total economic effect of such land promotional schemes as the one described above might be. It is apparent that South Milwaukee, now a thriving industrial suburb of some 12,000 persons, owes its very existence to the efforts of Fred Rogers

and his associates of the South Milwaukee Company. It is also clear that Bucyrus, Ohio, now a sleepy little community of 5,000, might have developed altogether differently had the Bucyrus Company, and its eventual payroll of 1,500 to 2,000 men, remained. As for the effect of the change upon the Bucyrus Company, it appears that the offer of \$50,000 for build-ings and land induced the Bucyrus management to expand hastily and not too wisely in relation to the demand for the Company's product. On the other hand, the new plant, once built, represented an investment in fixed assets which pushed the Company into an expansion of its product line and which, with the upturn in the economy around 1897, resulted in a business that was probably more dynamic, more aggressive, and better equipped than it would have been had it remained in Bucyrus, Ohio.

#### The Second Case -- How the Bucyrus Company Came to Evansville, Indiana

In 1910, the Bucyrus Company acquired financial control of the Vulcan Steam Shovel Company of Toledo, Ohio, a company which was the successor of a number of enterprises which had used manufacturing facilities located at Water and Lagrange Streets in Toledo since about 1872. Like the facilities of the Bucyrus Company at Bucyrus, Ohio, in 1891, the Vulcan plant was antiquated, and was not amenable to physical expansion. For these reasons the Vulcan management had begun, prior to the sale of the Company to Bucyrus, a search for a new manufacturing location, and had undertaken some preliminary negotiations with an organization in Evansville, Indiana. These negotiations were continued by the new owners.

Evansville, Indiana, in 1910 was a city of 90,000 persons sympathetic in culture and tradition toward the South rather than the North. Located on the north bank of the Ohio River, just across from Henderson, Kentucky and about 275 miles south of the transcontinental railroads which were the main traffic arteries of the nation, Evansville was well within the nation's "Bible Belt." The old-stock Evansville citizens, mainly of German origin, were even then fairly well diluted by an influx of factory workers from Kentucky and Tennessee who had been drawn northward by the Evansville industries. The newer arrivals were formerly hill-folk of fourth or fifth generation Scotch-Irish descent, traditionally a highly independent people, who had for nearly a century scratched out a scanty existence as farmers, trappers, and woodsmen in their native states. Slow moving, slow speaking, and strongly evangelical, the Evansville factory workers were far removed in nature and temperament from the predominantly Germanic, Slavic and Scandinavian work force at south Milwaukee, Wisconsin. Yet this is where the Bucyrus story turned in early 1910.

Instrumental in bringing Vulcan to Evansville was a group of local businessmen who had formed the West Side Industrial Association, a "non-profit" organization, on December 1, 1909, for the purpose of encouraging metal-working manufacturing firms to establish plants in the Evansville area. The first directors of the new corporation were George W. Varner, Henry E. Dreier, Henry C. Kleymeyer, Benjamin Bossee, and Benjamin J. Nurrenbern. Elected as officers were Varner, president; Dreier, vice-president; and C. E. Werner, secretary.<sup>9</sup>

It appears that these men were motivated by the fact that the town's major industries, lumbering and furniture manufacturing, had seriously

declined in recent years because of the virtual exhaustion of the magnificent stands of hardwood timber that had formerly bordered the Ohio River in the area of Evansville. In response to this threat to their business interests, the group had devised an apparently painless method of attracting new industry to the area, the plan being based upon the purchase and resale of some 400 to 500 acres of farm land located on the banks of the Ohio west of the city limits. This land, which the West Side Industrial Association could purchase for about \$80,000, was expected to provide some 2,600 residential and commercial building lots located in the foothills north of the river, plus an industrial site of about 200 acres. The latter was located between the foothills and the river bank on the river's historic flood lands, and was bisected by the tracks of the Louisville and Nashville Railroad. The sale of the building lots at some \$200 each was expected to provide over \$500,000 with which to purchase the land, pay cash and property bonuses to selected manufacturing firms and provide for the developmental and promotional expenses. Purchasers of the lots would presumably be civic minded Evansville citizens who would eventually recover their investment through the rising land values which were expected to accompany the industrial development of the area.

The Association began to put this plan into effect during January 1910, and on February 20, 1910 an advertisement in the Evansville Courier indicated that two industrial prospects had been obtained; the Pullman Motor Car Company of York, Pennsylvania, and the Vulcan Steam Shovel Company of Toledo, Ohio.

#### Exhibit I

Advertisement of the West Side Industrial Association  
in the Evansville Courier, Sunday, February 20, 1910

#### TWO GIANTS OF INDUSTRY THE

#### PULLMAN CAR COMPANY AND THE VULCAN IRON WORKS COMPANY

are knocking at the doors of Evansville. Two manufacturing plants that will employ from two to three thousand hand; that will go out in the world and earn from six to ten million dollars per year of new money and bring it into Evansville for the benefit and improvement of this old city. Wake up, wake up, let the dead arise if need be and grasp the opportunity here. The time to act is now; the time is short. Every person in Evansville must get a move on themselves quickly or these factories will be located in some other city, and it will take Evansville forty years to recover from the jolt and black eye that she will have by failing to grasp her present opportunity. Go to the lot sale headquarters down stairs in the E. B. A. building, look over the plats, and pick out your lots, because they must all be sold before next Saturday night.

EVERYBODY IN EVANSVILLE MUST GET BUSY  
AND ACT QUICKLY

The promotional fever had apparently seized the Evansville newspaper profession as well as the West Side Industrial Association, for a Courier article of the previous day had announced the Vulcan Company as a prospect and had described the concern as having assets of \$900,000

exclusive of patents, patterns and good will, as employing 700 men, and as "sending out to different parts of the world from 1,200 to 5,000 steam shovels and dredges which average in price from \$5,000 to \$75,000 each."<sup>10</sup> Actually the Vulcan Company had at this time net assets of less than \$450,000, had rarely employed more than 200 men, and had produced only about 600 steam shovels and dredges in the preceding ten years. This same article also stated that all the citizens of Evansville were asked to do toward bringing this "mammoth Toledo concern" to town was to buy 600 building lots at \$200 each, in addition to subscribing for the 2,000 building lots then being sold to finance the bringing of the Pullman Company to Evansville. It was stated that these subscriptions were needed to provide the Vulcan Company with a bonus of \$150,000 and with seventy acres of land. In return, the Evansville community was advised that it could expect the Vulcan Company to invest from \$250,000 to \$300,000 in buildings, and about \$1,000,000 in machinery, in addition to which the new plant would bring a 700-man payroll to town when it went into operation. Here, also, the article differed materially from the facts in that the investment plans of the Company, as of September 1910, called for buildings costing about \$175,000 and equipment in the amount of \$125,000.<sup>11</sup>

One week after the Evansville announcement of February 20, the plan to move the Vulcan Company to Evansville was reported in the Toledo Blade, with the additional information that Albany, New York, and Connelsville, Pennsylvania, had lost out on similar offers.<sup>12</sup> The announcement apparently created a difficult personnel problem for the Vulcan plant manager, Carl Horix, for he made the following statement to the Toledo Blade on March 1, 1910:

We do not intend to leave Toledo. We will, at least for the present, continue in business at our location at La Grange and Water streets. What we may ultimately do remains for the future to determine. We have had several propositions made to us to locate elsewhere, but thus far, we have made no arrangements.

Evidently the Evansville business community was slow in responding to its unusual opportunity, for the lot sale mentioned as beginning the week of February 20, 1910 was not successful and the Vulcan management did not then sign a contract to come to Evansville. On March 28, 1910, the assistant chief engineer of the Bucyrus Company, Walter Ferris, reported to President Howard P. Eells of the Bucyrus Company that he had just been to Evansville to "close the Vulcan contract in order to enable the Evansville people to publish the fact . . . , and enable them to proceed with a lot sale this week."<sup>13</sup> At this meeting, Ferris agreed that the Vulcan Company would accept \$100,000 in cash, 250 building lots "valued" at \$200 each, and a sixty-three acre plant site in lieu of the \$250,000 and the seventy-acre site originally contemplated.<sup>14</sup> At this time the Pullman Company was being urged to accept a similar compromise, although the results were as yet unknown.<sup>15</sup> Following the new agreement, lot sales again proved inadequate and a month later George A. Morrison of the Bucyrus Company reported that he had again been in Evansville at the request of the promoters and had addressed a meeting of prominent Evansville businessmen regarding the prospective advantages to the city of the proposed Vulcan plant. The promotional task by this time was considerably complicated by the fact that the Pullman Company

had "backed out" and an additional 600 building lots needed to be sold to finance the Vulcan proposal. Although Morrison thought that his appearance had helped matters somewhat, he reported to President Eells on May 5, 1910, that the Evansville association still lacked over \$16,000 of the \$100,000 cash bonus previously offered. Again Eells compromised, this time agreeing to accept 300 building lots "valued" at \$200 each, sixty-three acres of land, and \$90,000 in cash.<sup>16</sup>

Finally in June, 1910, the Vulcan Company agreed to accept \$75,000 in cash and \$15,000 in notes, plus the building lots and industrial land already mentioned. These properties were subsequently transferred to the books of the Bucyrus Company at the highly inflated valuation of \$60,000 for the building lots, and \$109,795 for the sixty-three acres of land. The speculative nature of this valuation is indicated by the fact that in later years the average residential and commercial lot thus obtained sold for under \$30, that the land had originally cost the West Side Industrial Association less than \$200 an acre, and that virtually no improvements had been made in the property.<sup>17</sup>

Construction of an extensive new plant for the manufacture of small revolving excavators was being in the fall of 1910 and completed in early 1913. In all, some \$450,000, exclusive of land, drawings, and patterns was invested in the facility during this period. With 120,000 square feet of manufacturing space, the new plant was probably capable of turning out about \$2,000,000 of excavators a year, at which rate the plant would have employed between 700 and 1,000 men and would have satisfied the entire nation's requirements for small revolving steam shovels and drag lines.

Unfortunately, a recession set in in 1912, and continued through 1914, with the result that neither the Bucyrus Company nor the Evansville community benefitted greatly at first. In fact, the plant was shut down entirely during most of 1914 and 1915. With the upturn in business that followed the outbreak of World War I, however, the new plant sprang to life and, even now, some forty years later, is a major factor in Evansville industry.

### In Conclusion

In the two cases just cited, the primary results of the industrial land development schemes seem to have been the westward movement of a heavy metal working industry, a more rapid expansion of productive capacity than would otherwise have occurred, and a shifting of funds from the inhabitants of the new area to the new industry as a means of stimulating the move. A careful examination of the Company's records leads to the conclusion that the Bucyrus management had no strong motivation for selecting the particular sites of South Milwaukee, Wisconsin, and Evansville, Indiana, other than the monetary inducement offered by the respective promotional organizations. The extent to which the pattern just described has been characteristic of plant location or relocation is largely unexplored, at least on a systematic basis. It would appear, however, that the influence of industrial land development programs upon patterns of economic growth has been sizeable over a very long period of time.

## FOOTNOTES

1. South Milwaukee: A Concise Sketch of the Great Manufacturing and Residence Suburb, a pamphlet produced by the firm of Erbacher and Gottschalk of 457 East Water Street, Milwaukee, and dated 1893.
2. South Milwaukee Journal, 14 December 1912, pl. "City Celebrates 20th Birthday."
3. Contract of October 3, 1891, between the South Milwaukee Company and the Bucyrus Steam Shovel and Dredge Company.
4. South Milwaukee Journal, January 1, 1893, p. 3.
5. South Milwaukee Journal, March 18, 1893, p. 1.
6. South Milwaukee Journal, December 14, 1912, p. 1.
7. South Milwaukee Journal, June 8, 1901, p. 3.
8. South Milwaukee Journal, December 14, 1912, p. 1.
9. Minute book of the West Side Industrial Association; book now in the custody of the Evansville Chamber of Commerce.
10. Evansville Courier, February 19, 1910, p. 1.
11. W. W. Coleman to Howard P. Eells, September 2, 1910. Letter in archives of Bucyrus-Erie Company.
12. Toledo Blade, February 26, 1910.
13. Letter from Walter Ferris to Howard P. Eells, March 28, 1910.
14. Evansville Journal, March 28, 1910, p. 1.
15. Ibid.
16. Minute book of the West Side Industrial Association, entry of May 31, 1910.
17. Letter of George A. Morrison to Howard P. Eells of May 5, 1910 cites the West Side Industrial Association's real estate cost as \$90,000 and the improvements made as having cost \$7,500. The West Side Industrial Associations financial records, which are in the custody of the Evansville Chamber of Commerce, indicate real estate costs of \$79,650. The minute book of the West Side Industrial Association reveals that in 1917 the Association turned over its remaining assets, viz., fifty-seven and one-half acres of land and 500 building lots together with a liability of \$17,500 owed to the West Side Bank, to the Evansville Business Association at no cost. Miss Mabel DeJarnet, secretary to the Evansville Chamber of Commerce, reported in an interview of May 10, 1953, that the Chamber of Commerce still had numerous unsold lots on hand and that the prices currently received for the lots had ranged from about \$15 to \$35, these being the highest prices that the Evansville Chamber of Commerce has ever received for these properties.







